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Botany, Dr. Litton and Dr. Mitchell; 11, Tuesdays, Thursdays, and Saturdays.

Midwifery, Mr. Speedy; 4, Tuesdays, Thursdays, and Saturdays.

Medical Jurisprudence, Dr. Leet and Mr. Purcell; 3, on the two first days in each week.

Practical Chemistry, Dr. Kane.

DUBLIN SCHOOL OF MEDICINE,

27, *Peter-street*.

Anatomy, Physiology, and Pathology, Dr. Bevan, A.M.

Practical Anatomy and Dissections, Mr. Stoker and Mr. Madden.

Surgery, Mr. Auchinleck and Dr. Woodroffe.

Practice of Medicine, Dr. Corrigan.

Materia Medica and Therapeutics, Dr. Neligan.

Botany, Dr. Mitchell.

Medical Jurisprudence, Dr. C. O'Reilly.

Midwifery, Dr. R. L. Nixon and Dr. Mac Cormack.

The Dissecting Rooms, lighted with gas.

ORIGINAL SCHOOL OF MEDICINE AND SURGERY,

28, *Peter-street, Dublin*.

Anatomy and Physiology, Mr. Hayden.

Surgery, Mr. Tagert and Mr. T. Hayden; 11, Mondays, Tuesdays, Thursdays, and Saturdays.

Midwifery, Dr. Ireand; 3, Mondays, Wednesdays, and Fridays.

Admission to Anglesey Lying-in Hospital, for those attending Midwifery Lectures, £4 4s. Deposit for Subjects, £1 10s.

Materia Medica and Therapeutics, Dr. Eades; 2, Mondays, Wednesdays, and Fridays.

Practice of Medicine, Dr. Sargent; 4, Mondays, Wednesdays, and Fridays.

Practical Anatomy and Dissections, Mr. Sawyer and Mr. Forrest.

SIR PATRICK DUN'S HOSPITAL.

Physicians in Ordinary, Robert Law, Esq., M.D., and John C. Ferguson, Esq., M.D.

Accoucheur, W. F. Montgomery, Esq., M.D.

Surgeon, A. Jacob, Esq., M.D.

Clinical Visit, daily, at 9 o'clock.

Clinical Lectures, three months, £3 3s., from May to October.

Hospital Fee, twelve months, £10 10s.; for Students in Arts, £3 3s.

MEATH HOSPITAL.

Medical Lectures by Dr. Robert J. Graves and Dr. William Stokes.

Surgical Lectures by Sir P. Crampton, Bart., Cusack Roney, Esq., William H. Porter, Esq., Maurice Collis, Esq., Josiah Smyly, Esq., and Francis Rynd, Esq.; at 8½, a.m.

Terms—Twelve months, £12 12s.; seven months, £7 7s.

RICHMOND HOSPITAL.

The Richmond Hospital contains 120 beds for Surgical Cases, and has distinct wards for Venereal Diseases and Diseases of the Eye.

The Hardwicke Hospital, which is attached to it, contains 144 beds for Fever Cases. The Whitworth, containing 82 beds, is appropriated to the treatment of other Medical diseases.

Two Surgical Clinical Lectures are delivered in each week by the Surgeons of the Hospitals; and two Medical Clinical Lectures by the Physicians, Dr. Corrigan and Dr. Greene.

The Medical Hospitals are visited daily, at 8 o'clock and the Surgical Hospital at 9 o'clock, a.m.

Terms—For the Winter Six Months, £7 7s.; for the Summer Six Months, £5 5s.

Surgeons, R. M. Peile, M.D., Mr. R. Carmichael, Edward Hutton, M.D., J. O'Beirne, M.D., Mr. R. Adams, J. MacDonnell, M.D.

Physicians, Dr. Corrigan and Dr. Greene.

DR. STEEVENS' HOSPITAL.

Medical Clinical Lectures by Sir H. Marsh and Dr. Croker.

Surgical Clinical Lectures by Mr. Colles, Mr. Wilmot, and Mr. Cusack; at 8 o'clock every morning.

Terms of attendance on the Medical and Surgical Wards, Lectures included—First Year, £15 15s.; second, and each subsequent year, £10 10s.

This Hospital contains 200 Patients, and is provided with distinct Wards for the accommodation of Patients afflicted with the Venereal Disease, and Diseases of the Eye.

MERCER'S HOSPITAL.

Physicians, Jonathan Osborne.

Surgeons, Mr. A. Read, Mr. W. Auchinleck, Mr. W. Daniell, Mr. A. Palmer, and Mr. W. Tagert.

The daily visit takes place at 9 o'clock, a.m., and due notice is given of operations at unusual hours.

Clinical Lectures are delivered in the theatre, by the Physician and Surgeons, on two days in the week, exclusive of daily remarks at the bed-side.

Dressers are selected from the Class, according to their merits, without additional payment.

CITY OF DUBLIN HOSPITAL, *Upper Baggot-street.*

Fee for Six Months, £6 6s.; Fee for Twelve Months, £9 9s.

Medical Attendants, Dr. Jacob, Dr. Apjohn, Dr. Benson, Dr. Houston, Dr. Hargrave, and R. C. Williams, Esq.

The Hospital visit takes place every morning at 8, and Clinical Lectures are given on three days in each week.

JERVIS-STREET HOSPITAL.

Due notice is given of Operations, &c. &c.

There is an extensive Dispensary attached to the Hospital, at which the Pupils have the advantage of performing the minor operations of Surgery, and of making themselves familiar with Dispensary Practice.

Attentive Pupils are eligible, without any additional fee, to the office of Dressers.

The Hospital, which is visited every morning at 9 o'clock by the attending Physicians and Surgeons, contains 80 beds.

Clinical Lectures are delivered on three days in the week.

Physicians, Dr. Corrigan and Dr. Hunt.

Surgeons, Mr. J. Kirby, Mr. J. Duggan, Mr. R. P. O'Reilly, Mr. A. Ellis, Mr. J. Lynch, Dr. M. H. Stapleton, and Dr. Harrison.

Terms—For the Winter Six Months, £6 6s.; for Twelve Months, £9 9s.

ST. VINCENT'S HOSPITAL.

The Hospital is visited daily at 8 o'clock, a.m.

Clinical Lectures are delivered every week during the Session, and Clinical Instruction daily.

Terms—For Twelve months, £7 7s.; for Six Months, £4 4s.

Medical Officers, Mr. J. M. Ferrall and Dr. Bellingham.

DUBLIN LYING-IN HOSPITAL.

The Hospital contains 140 beds, fifteen of which are appropriated to the Diseases of Females, and external cases of Female diseases are treated every morning. The usual courses of Lectures will be delivered by the Master, Dr. Johnson.

External Pupils, Six Months, £10 10s.; Internal Pupils, Six Months, £21. Including attendance on the Lectures and the Practice of the Hospital.

In addition to the Lying-in Hospital, there are five other institutions, to which Pupils are admitted on the payment of very moderate fees.

SCOTLAND.

UNIVERSITY OF EDINBURGH.

Anatomy and Physiology, Dr. Monro.

Botany, Dr. Graham.

Chemistry, Dr. Hope.

Surgery, Mr. Miller.

General Pathology, Dr. Henderson.

Practice of Physic, Dr. Alison.

Theory of Physic, Dr. Allen Thomson.

Materia Medica, Dr. Christison.

Midwifery, Dr. Simpson.

Medical Jurisprudence, Dr. Trail.

Military Surgery, Sir G. Ballingall.

Clinical Medicine, Dr. Alison, Dr. Graham, Dr. Christison, and Dr. Trail.

Clinical Surgery, Mr. Syme.

The Fees for each Class vary from £4 6s. to £4 9s. Graduation Fee, £24 19s.

UNIVERSITY OF GLASGOW.

Medical Jurisprudence, Dr. R. Cowan; 8, a.m.

Surgery, Dr. John Burns; 9, a.m.

Chemistry, Dr. Thomas Thomson; 10, a.m.

Midwifery, Dr. J. M. Pagan; 11, a.m.

Practice of Medicine, Dr. William Thomson; 12, noon.

Anatomy, Dr. J. Jeffray; 1, p.m.

Materia Medica, Dr. J. Couper; 4, p.m.

Practical Demonstrations, Dr. T. Marshall; 5, p.m.

Botany, Dr. J. H. Balfour; 6, p.m.

Institutes of Medicine, Dr. Andrew Buchanan; 7, p.m.

Lectures on the Eye, Dr. W. Mackenzie; 8, p.m.

Fee for each Course, £3 3s.

The Royal Infirmary, containing above 400 beds, is open to all Students. Fee for two years, including two Courses of Clinical Lectures, £7 7s.

ANDERSON'S UNIVERSITY, GLASGOW.

Principles and Practice of Surgery, Dr. Laurie.

Chemistry, Dr. Penny.

Practical Chemistry, Dr. Penny.

Midwifery and Diseases of Women and Children, Dr. Paterson.

Practice of Physic, Dr. Hannay.

Anatomy, Demonstrative and Surgical, Dr. M. S. Buchanan.

Materia Medica, Dr. Easton.
 Anatomy, Descriptive and Physiological, Dr. M. S. Buchanan.
 Medical Jurisprudence and Police, Dr. Crawford.
 Institutes of Medicine, Dr. Anderson.
 Natural History and Comparative Anatomy, George Gardner, Esq., F.L.S., &c.
 Mechanical Philosophy, Peter Wilson, Esq.
 Botany (to begin in February), George Gardner, Esq., F.L.S.
 Fee for each Class, £2 2s.

MARISCHAL COLLEGE, ABERDEEN.

Anatomy, Dr. Lizars.
 Chemistry, Dr. Clark.
 Materia Medica, Dr. Henderson.
 Institutes of Medicine, Dr. Harvey.
 Practice of Medicine, Dr. Macrobain.
 Surgery, Dr. Pirrie.
 Midwifery, Dr. Dyce.
 Medical Jurisprudence, Dr. Ogston.
 Fees—The Fee for each of the above Classes is £3 3s.

Perpetual Fee to the Hospital, which contains 200 beds, including unlimited attendance on the Clinical Lectures, £7 7s.

Summer Session.

Botany, Professor Macgillivray.
 Anatomy, Comparative, Surgical, and Practical, Dr. A. J. Lizars.
 Medical Jurisprudence, Dr. Ogston.
 Midwifery, Dr. Dyce.
 Fee, for all Classes required by the College and Hall, £40.

* * * We have omitted a few schools, prospectuses of which we were unable to obtain.

REGULATIONS OF LICENSING BOARDS.

University of London.

BACHELOR OF MEDICINE.

Candidates are required—

To have been engaged during four years in their professional studies at one or more of the Institutions or Schools recognised by the University.

To have spent one year, at least, of the four, in one or more of the recognised Institutions or Schools in the United Kingdom.

To pass two Examinations.

For the *First Examination*, which takes place once a-year, and commences on the first Monday in August, the Candidate is required to produce certificates—

Of having completed his nineteenth year.

Of having taken a Degree in Arts in the University, or in a University the Degrees granted by which are recognised by the Senate of the University, or of having passed the Matriculation Examination.

Of having been a Student during two years at one or more of the Medical Institutions or Schools recognised by the University, subsequently to having taken a Degree in Arts, or passed the Matriculation Examination.

Of having attended a Course of Lectures on each of four of the subjects in the following list:—

Descriptive and Surgical Anatomy, General Anatomy and Physiology, Comparative Anatomy, Pathology, Chemistry, Botany, Materia Medica

and Pharmacy, General Pathology, General Therapeutics, Forensic Medicine, Hygiene, Midwifery and Diseases peculiar to Women and Infants, Surgery, Medicine.

Of having dissected during nine months.

Of having attended a Course of Practical Chemistry.

Of having attended to Practical Pharmacy during a sufficient length of time to enable him to acquire a practical knowledge in the Preparation of Medicines.

The Fee for the Examination is £5.

Candidates to be examined in the following subjects:—

Anatomy and Physiology, Chemistry, Structural and Physiological Botany, Materia Medica and Pharmacy, by written answers.

Anatomy and Physiology, by *viva voce*, and Demonstration from Preparations, and Printed Papers.

Chemistry, Materia Medica, and Pharmacy, by *viva voce*, and Demonstrations from Specimens.

The *Second Examination* takes place once a-year, and commences on the first Monday in November.

No Candidate is admitted to this Examination within two academical years of the time of his passing the first Examination, nor unless he produces certificates—

Of having passed the first Examination.

Of having, subsequently to having passed the first Examination, attended a Course of Lectures on each of two of the subjects comprehended in the list, and for which the Candidate had not presented certificates at the first Examination.

Of having, subsequently to having passed the first Examination, dissected during six months.

Of having conducted at least six labors.

Of having attended the medical practice of a recognised hospital, or hospitals, during twelve months, and lectures on Clinical Surgery.

Of having attended the surgical practice of a recognised hospital, or hospitals, during other twelve months, and lectures on Clinical Medicine.

Of having, subsequently to the completion of his attendance on Surgical and Medical Hospital Practice, attended to Practical Medicine in a recognised hospital, infirmary, or dispensary, during six months.

The fee for this Examination, £5.

Candidates to be examined in the following subjects:—

Physiology and Comparative Anatomy, General Pathology, General Therapeutics, Hygiene, Surgery, Medicine, Midwifery, Forensic Medicine.

REGULATIONS RELATING TO PRACTITIONERS IN MEDICINE OR SURGERY DESIROUS OF OBTAINING DEGREES IN MEDICINE.

DEGREE OF BACHELOR OF MEDICINE.

Candidates shall be admitted to the two Examinations for the Degree of Bachelor of Medicine on producing Certificates to the following effect:—

1. Of having been admitted, prior to the year 1840, Members of one of the legally constituted bodies in the United Kingdom for Licensing Practitioners in Medicine or Surgery, or of having served, previously to 1840, as Surgeons or Assistant-surgeons in her Majesty's Army, Ordnance, or Navy, or in the service of the Honorable the East India Company.

2. Of having received a part of their education at a

recognised Institution or School, as required by the charter of the University.

3. Of Moral Character, signed by two persons of respectability.

Candidates who have not taken a Degree in Arts, or passed the Matriculation Examination in this University, will be required to translate a portion of Celsus de Re Medica.

University of Dublin.

The times of graduation are Shrove Tuesday and the first Tuesday in July. The Medical Examinations terminate the Tuesday of the preceding week. Candidates must previously have completed their Medical education, and produced a chart testifying to the details of the same, and subscribed by the Registrar to the Professors in the School of Physic, as well as by the persons signing the Certificates.

Medical Students may obtain the Degree of Bachelor of Medicine in two modes.

1. Candidates *who have graduated in Arts* may obtain the Degree of Bachelor of Medicine at any of the ensuing half-yearly periods of graduation, provided the requisite Medical education and Examinations shall have been accomplished. The payment at entrance is £15. The fees for study in Arts, during four years, are £7 10s. each half year; and the fees for graduation in Arts, £8 17s. 6d.

2. Candidates are admissible to the Degree of Bachelor of Medicine, *without previous graduation in Arts*, at the end of five years from the July following the Hilary Examination of the first undergraduate year, provided the usual education and examinations in Arts of the *first two years of the undergraduate course* shall have been completed, as also the Medical education and examinations, as in the case of other Candidates. The standing of the first undergraduate year may be obtained by attending the October examination of that year, if the student has entered not later than the first Monday of the July of the same year, and has completed the payments previously made by his class.

The graduation fees for the Degree of Bachelor of Medicine are £11 15s.

The Medical education of a Bachelor of Medicine comprises attendance on the following Courses of Lectures (three, at the discretion of the Candidate, may be attended at the University of Edinburgh) in the School of Physic, provided that *one, and not more than three*, of the Courses which begin in November be attended during *each of four sessions*. The Courses are on Anatomy and Surgery, Chemistry, Botany, Materia Medica and Pharmacy, Institutes of Medicine, Practice of Medicine, Midwifery, Clinical Lectures at Sir Patrick Dun's Hospital during at least one session of *six months*, as delivered by the Professors in the School of Physic, the attendance on such Clinical Lectures by the Professors to be extended to three additional months of a summer session, commencing in May. This regulation to affect all Students commencing their studies after the 17th of July, 1841, and to be in lieu of attendance on the Hospital from the 1st of May to the 1st of November following.

University of Edinburgh.

Sect. I. No one shall be admitted to the Examinations for the Degree of Doctor of Medicine who has

not been engaged in medical study for four years, during at least six months of each, either in the University of Edinburgh or in some other University where the Degree of M.D. is given; unless, in addition to three Anni Medici in an University, he has attended, during at least six winter months, the medical or surgical practice of a General Hospital, which accommodates at least eighty patients, and during the same period a Course of Practical Anatomy, in which case three years of University study shall be admitted.

Sect II. No one shall be admitted to the examinations for the Degree of Doctor who has not given sufficient evidence,—

1. That he has studied, once at least, each of the following departments of Medical Science, under Professors of Medicine in this or in some other University, as already defined—viz.,

During Courses of Six Months.—Anatomy, chemistry, materia medica and pharmacy, institutes of medicine, practice of medicine, surgery, midwifery and the diseases peculiar to women and children, general pathology, practical anatomy (unless it has been attended in the year of extra-academical study allowed by Sect. I.)

During Courses of Six Months, or two Courses of Three Months.—Clinical medicine—that is, the treatment of patients in a public hospital, under a Professor of Medicine, by whom lectures on the cases are given.

During Courses of at least Three Months.—Clinical surgery, medical jurisprudence, botany, natural history, including zoology.

2. That in each year of his academical studies in medicine, he has attended at least two of the six months' courses of lectures above specified, or one of these and two of the three months' courses.

3. That, besides the course of Clinical Medicine already prescribed, he has attended, for at least six months of another year, the medical or surgical practice of a general hospital, either at Edinburgh or elsewhere, which accommodates not fewer than eighty patients.

4. That he has attended, for at least six months, by apprenticeship or otherwise, the art of compounding and dispensing drugs at the laboratory of an hospital, dispensary, member of a surgical college or faculty, licentiate of the London or Dublin Society of Apothecaries, or a professional chemist or druggist.

5. That he has attended, for at least six months, by apprenticeship or otherwise, the out-practice of an hospital, or the practice of a dispensary, or that of a physician, surgeon, or member of the London or Dublin Society of Apothecaries.

Sect. III. No one shall obtain the degree of Doctor who has not studied, in the manner already prescribed, for at least one year previous to his graduation, in the University of Edinburgh.

Sect. IV. Every Candidate for the Degree in Medicine must deliver before the 24th of March, of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine,—

First. A Declaration, in his own handwriting, that he is twenty-one years of age, or will be so before the day of graduation, and that he will not be then under articles of apprenticeship to any surgeon or other master.

Secondly. A statement of his studies, as well in literature and philosophy as in medicine, accompanied with proper certificates.

Thirdly. A medical dissertation composed by himself, in Latin or English; to be perused by a Professor, and subject to his approval.

Sect. V. Before a Candidate be examined in Medicine, the Medical Faculty shall ascertain, by examination, that he possesses a competent knowledge of the Latin language.

Sect. VI. If the Faculty be satisfied on the point, they shall proceed to examine him, either *viva voce* or in writing; *first*, on Anatomy, Chemistry, Botany, Institutes of Medicine, and *Natural History* bearing chiefly on Zoology; and, *secondly*, on Materia Medica, Pathology, Practice of Medicine, Surgery, Midwifery, and Medical Jurisprudence.

Sect. VII. Students who profess themselves ready to submit to an examination on the first division on these subjects, at the end of the third year of their studies, shall be admitted to it at that time.

Sect. VIII. If any one, at these private examinations, be found unqualified for the Degree, he must study for another year two of the subjects prescribed in Section II., under Professors of Medicine, in this or in some other University, as above defined, before he can be admitted to another examination.

The Examinations are now conducted in the English language. Fee for graduation, £24 19s.

University of Glasgow.

MEDICINE.

I. Every Candidate for a Medical Degree must lodge, with the Clerk of Senate, a Certificate of moral character, with evidence that he has attained the age of twenty-one.

II. He must produce evidence of having attended, for four years, some University where Medicine is regularly taught, or the Medical Lectures delivered in London or Dublin. In each year he must have attended at least two Courses of Lectures of six months' duration, and one year of the four must be spent at the University of Glasgow. If one year only, then attendance must have been given on, at least, three Courses of Lectures delivered there, two of them being of six months' duration.

III. He must produce Certificates of having attended one or more Courses of Lectures on the following subjects; each Course, with the exception of Forensic Medicine and Botany, being of six months' duration; if of less extent, then two Courses will be deemed equivalent to one of six months:—Anatomy and physiology, chemistry, the theory or institutes of medicine, materia medica and pharmacy, midwifery, surgery, forensic medicine (not less than three months), botany (not less than three months), anatomical dissections (six months), a general hospital (two years), the said hospital containing eighty beds at least, and in which the Student must spend at least one half of the period of his attendance in the Physicians' Wards.

IV. Each Candidate for a Medical Degree must announce his intention, and lodge with the Clerk of Senate the above testimonials, together with an English Essay on some Medical subject chosen by himself, two months before the time of graduation—

that is, on or before the 1st of March or the 10th of June, yearly.

The Candidates are examined in all the subjects included in the Curriculum, and in Latin. Fee, £25 3s.

College of Surgeons, London.

Regulations of the Council of 1841, respecting the Professional Education of Candidates for the Diploma, 1839. Amended October, 1841.

I. Candidates will be required, in addition to a Certificate of being not less than twenty-one years of age, to bring proof—

1. Of having been engaged in the acquirement of professional knowledge for not less than four years, during which period they must have studied Practical Pharmacy for six months, and have attended one year on the Practice of Physic, and three years on the Practice of Surgery, at a recognised Hospital or Hospitals in the United Kingdom—three months being allowed for a vacation in each year.

By a Resolution of the Council, on the 7th of November, 1839, no Provincial Hospital will in future be recognised by this College, which contains fewer than 100 Patients, and no Metropolitan which contains fewer than 150 Patients.

2. Of having studied Anatomy and Physiology, by attendance on Lectures and Demonstrations, and by Dissections, during three Anatomical Seasons or Sessions, *extending from October to April, inclusive.*

3. Of having attended at least two Courses of Lectures on the Principles and Practice of Surgery, delivered in two distinct periods or seasons, each Course comprising not less than seventy Lectures; and one Course of not fewer than seventy Lectures, on each of the following subjects—viz., the practice of physic, chemistry, materia medica, and midwifery, with practical instruction.

II. Members and Licentiates in Surgery of any legally constituted College of Surgeons in the United Kingdom, and Graduates in Surgery of any University requiring residence to obtain Degrees, will be admitted for examination on producing their Diploma, License, or Degree, together with proofs of being twenty-one years of age, and of having been occupied at least four years in the acquirement of professional knowledge.

III. Graduates in Medicine of any legally constituted College or University requiring residence to obtain Degrees, will be admitted for examination on adducing, together with their Diploma or Degree, proof of having completed the anatomical and surgical Education required by the foregoing Regulations, either at the School of the University, where they shall have graduated, or at a recognised School or Schools in the United Kingdom.

After October 1, 1842, Candidates will *only* be admitted to Examination under the above regulations, except under particular circumstances of apparent hardship, which must be represented by letter to the Court.

Apothecaries' Hall, London.

Every Candidate must produce testimonials—

1. Of having served an apprenticeship of five years to a legally qualified Apothecary.
2. Of being twenty-one years of age.
3. Of good moral conduct.

Course of Study.

Every Candidate, whose attendance on Lectures commenced on or after the 1st of October, 1835, must produce Certificates of having attended the following Lectures and Medical Practice during not less than three Winter and two Summer Sessions:—

First Winter Session.—Chemistry, anatomy and physiology, anatomical demonstrations, materia medica, and therapeutics.

First Summer Session.—Botany; but this may be attended during any Summer Session.

Second Winter Session.—Anatomy and physiology, anatomical demonstrations, dissections, practice of medicine.

Second Summer Session.—Forensic medicine.

Third Winter Session.—Dissections; practice of medicine; midwifery, two courses, in separate Sessions, and subsequent to end of first Winter Session; practical midwifery, at any time after first course of midwifery; medical practice for eighteen months, the first twelve at some recognised hospital, the other six at an hospital or recognised dispensary.

All Students in London are required to appear personally, and to register the several classes for which they have taken tickets; and those only will be considered to have complied with the regulations of the Court whose names and classes in the register correspond with the testimonials of the teachers.

The book will be open for the registration of tickets authorising the attendance of Students on lectures and medical practice, in the months of October and May; and for the registration of certificates of having *duly attended* such lectures or medical practice, in the months of April and August. Due notice of the days and hours of registration will be given from time to time.

Provincial Students must also register their names with the registrar of each respective School.

Preliminary Examination.—Students may undergo their Latin Examination at any time after their first registration, except during the months of August and September.

Examination.—The Examination of the Candidate for a Certificate of Qualification to Practise as an Apothecary will be as follows:—In translating portions of the first four books of Celsus de Medicinâ, and of the first twenty-three chapters of “Gregory’s *Conspectus Medicinæ Theoreticæ*,” in physicians’ prescriptions, and the “*Pharmacopœia Londinensis*,” in chemistry; in materia medica and therapeutics; in botany; in anatomy and physiology; in the principles and practice of medicine. This branch of the examination embraces an inquiry into the pregnant and puerperal states, and also into the diseases of children.

Fees—London and ten miles round, £10 10s.; Country, £6 6s.; Assistants’ Certificate, £2 2s.

ABSCESS OF THE PROSTATE GLAND.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The following case was a source of much disappointment to me, because the removal of my patient to a distant place deprived me of an opportunity, which I otherwise should have had, of ascer-

taining, after death, the appearances of the spinal cord, the kidneys, and the contents of the pelvis.

We find an abscess in the chest evacuate itself through the liver and abdominal muscles; one from the psoas muscle, through the muscles of the back or through the fascia lata in front or back part of the thigh; and in this case my curiosity was excited to know whether or not matter had passed from a psoas muscle to the prostate gland.

CASE.—A. B., aged thirty (Feb. 16, 1842), of a scrofulous constitution, married two years and a half ago; has two children, the youngest ten years old. During 1840 and 1841 his brain and nervous system were over-excited by study, previous to taking holy orders, and by anxiety of mind from the embarrassed state of his affairs.

When I first saw him, early in September, 1841, he could not sleep at night, and his pulse was permanently 120. From the constitutional disturbance, I supposed he would soon become affected with local disease in the lungs, mesentery or spinal cord; though, from the pains about his loins, I chiefly apprehended psoas abscess.

During September and October he had colds from time to time and occasional violent pains, as if from lumbago. In the middle of September he told me he was going to Buxton for a fortnight; to which step I did not object, thinking his mind might be relieved by a short absence from home, but I advised him not to bathe until he had consulted a physician there. He returned without having obtained any relief, and having procured a German work on hydropathy, he wished to try the effect of that system. To this I decidedly objected, and prevailed upon him to take the syrup of sarsaparilla.

During the early part of October he suffered less from the lumbar pains, and his pulse became more steady and quiet. Towards the end of that month his wife told me secretly that he had begun the cold water plan, observing, that although she could not conscientiously keep me in ignorance of that circumstance, yet that I must not divulge the secret, as a knowledge of the communication would violently agitate him, &c. He had cold, wetted towels applied along the whole of his back during the greater part of a night. His pulse became much quicker, his lumbar pains more acute, and he had a burning pain under (inside) the sacrum, much increased during the expulsion of his stools. I inquired of him whether he could possibly have got fresh cold; to which he replied, that he sometimes injected cold water as a clyster, whilst standing out of bed in his night-shirt; whereupon I remarked, that he would become a great sufferer from rheumatism, &c. On the 6th of November the lower limbs became suddenly paralytic; he had retention of urine, and, being unable to pass a catheter without my finger in the rectum, I felt the prostate gland very much enlarged, and found that it was exceedingly sensitive, for pressure with my finger gave him excruciating pain. Owing to a tormenting irritability at the neck of his bladder, the urine was drawn off every four or six hours.

From the 12th to the 22nd of November, the urine contained offensive pus, and during those ten days as much as a quart of matter was evacuated from some abscess through the prostate gland into the bladder or

urethra. The urine then became perfectly limpid at times, afterwards *always* clear. During the ten days before mentioned, —, when introducing the catheter, matter would sometimes pass through it before it had entered the bladder, but the greater part of the matter always came off the last.

The subsidence of the constitutional disturbance was progressive with the discharge of matter, and the pulse settled down to from 70 to 80 in the beginning of December. During that month the urine also passed off without the use of the catheter, but, after a disordered state of the bowels with constipation, it was used again early in January, and towards the end of that month the urine again contained matter, as if the abscess had filled and emptied itself a second time, but there was much less of it in quantity.

Circumstances led to the removal of A. B. to his father's house, a distance of upwards of seventy miles from Retford, and having waited until his wife was considered safe, after her confinement, which happened on the 6th of February, he left this place accompanied by his man, who had generally introduced the catheter. He died towards the end of April. I had always felt anxious to know the seat of the abscess; had obtained his wife's consent, by letter, for a post-mortem examination, and had written to his medical attendant on the subject; but, after death, the surgeon declined making any examination.

I mentioned this case to a physician, who at once suggested "that the matter might have come from a kidney down the ureter;" but I think the matter must have passed through the prostate gland into the bladder, and probably, also, by a second ulceration, directly into the urethra. First, because the prostate was enlarged before, but not after the evacuation of matter; secondly, because there was thick matter in the urethra when a catheter was introduced, which would not have been there from the bladder without urine also; thirdly, because matter came into the bladder too quickly to have passed through the ureter (from one to two ounces every six hours during one day); and, fourthly, because there was not at any time a deficiency of urine. However, I cannot say whence it came. The first question is, whether or not a kidney produced the matter which passed off through natural channels; if not, other questions arise—viz., could the glands in, or the muscles about, the pelvis produce the matter, or that part of the mesentery called meso-rectum? In such a delicate subject of lax fibre, could a psoas abscess evacuate itself under the peritoneum and through the prostate gland?

If any one of your correspondents has seen a similar case, and has inspected the body after death, I shall be greatly obliged if he will say where the abscess was found.

I am, Gentlemen,

Yours very respectfully,

W. ALLISON.

East Retford, September, 1842.

OVARIAN DROPSY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Allow me to state, in reply to "A Medical Student," that the operation in the case alluded to was performed in the linea alba. For my own part, I have never seen occasion to perform it in any other situation, the parietes of the abdomen being so much more free from muscular structure, and there being no danger of wounding the epigastric artery. I should not think of making a puncture in any other part of the abdomen, unless there were some obvious peculiar circumstance in the case which prevented its being done there.

I have now performed the operation a great many times, and have as yet seen no cause to vary the mode of it. I have at this time three cases under my care which require its occasional aid.

The case related was meant chiefly to remind those who have not had to perform the operation frequently, that the fluid is sometimes so viscid that it will not pass through the trocar—that it is contained occasionally in separate cells divided by septa—and that there is great difficulty in distinguishing before hand its degree of density, as I have never seen a clearer case of equable fluctuation than this one. The patient appeared to be too near death at the time the operation was undertaken to allow of the hazard of a puncture in another situation, so completely against her own wishes.

I am, Gentlemen,

Yours truly,

ROBERT STORRS.

Doncaster, September 22, 1842.

PRACTICAL REMINISCENCES, FROM THE LECTURES OF THE LATE DR. HAMILTON,

Professor of Midwifery in the University of Edinburgh.

(From the Note Book of an Old Pupil.)

POSITION OF UTERUS DURING PREGNANCY.

The uterus emerges from the pelvis between the third and fourth months; at the end of four calendar months it is the size of a Florence flask; at five months the fundus is midway between the pubis and umbilicus; at six months, as high as the umbilicus; at seven months, at middle point between navel and ensiform cartilage; at eight months, at ensiform cartilage, it is then stationary or slightly sinks.

SIZE OF FÆTUS.

Between four and five weeks it is the size of a common fly; at six weeks, length one and a quarter inch; at two months, length two inches; at ten weeks, length two and a half inches; at three months, length three inches; at four months, length exceeds five inches; at five months, length between eight and nine inches; at six months, length between eleven and twelve inches; at seven months, length between fourteen and fifteen inches; at eight months, length between sixteen and seventeen inches; at nine months, length between seventeen and twenty-two inches. The weight of the fœtus varies from five to thirteen pounds; ordinary weight, at full period, seven pounds.

Monsters may be divided into—1, M. with redundant parts; 2, M. with defective parts; 3, M. with misplaced parts; 4, M. with a combination of the three former; 5, M. resembling two different species of animals.

There are four kinds of labor,—*natural, laborious, preternatural, complex* :—

Natural.—When it is completed with safety to mother and child within twenty-four hours.

Laborious.—When protracted beyond twenty-four hours.

Preternatural.—When other parts than the head are present.

Complex.—All cases where infant or mother are exposed to hazard from circumstances which do not happen in the three former divisions.

THREE STAGES OF LABOR.

1, The opening of os uteri; 2, the actual passage of infant; 3, the separation and expulsion of secundines.

First stage may be retarded by—1, Premature discharge of liq. amnii; 2, natural toughness of texture; 3, band of cervix uteri not expanded; 4, great relaxation of contents of pelvis.

Management of First Stage.

Depression of spirits not to be interfered with, save by cheerful and encouraging conversation. Shivering or trembling, if violent, apply warm flannels to pit of stomach, bottles of hot water to feet; give tinct. valerian. ammon. Vomiting is generally a favorable symptom; if it continue too long, have recourse to venesection or half a grain of opium. If os uteri be not dilated at the end of twelve hours, employ blood-letting, opiate clysters, and support os uteri during pain.

Management of Second Stage.

On rupture of membranes, carefully examine advancing part. Pain of back may be relieved by counter pressure on back of sacrum. For cramps, apply tight ligature round calf of leg; support perineum and use lard; see navel string be not round the infant's neck.

Management of Third Stage.

If the placenta be not thrown off within an hour after the completion of the second stage, it must be extracted by art.

The placenta may be retained from—1, Atony of uterus: apply heat or friction to abdomen, and stimulant clyster. 2, Irregular contraction: if no hæmorrhage, an opiate, and introduce hand. 3, Morbid adhesion: indicated by hæmorrhage following birth of infant, pains without lengthening of cord.

LABORIOUS LABOR.

Of this there are three orders—1, delivery is effected at last by natural powers; 2, by mechanical means with safety; 3, when it is impossible to extract the infant alive through the natural passages, from actual disproportion between infant and passages.

Deficient action of uterus is the effect of—1, general debility; 2, depressing passions of mind; 3, debility of uterus itself; 4, interrupted circulation of blood.

Increase in resistance is occasioned by—1, pendulous belly; 2, rigidity of membranes; 3, unfavorable position of child's head; 4, unyielding state of soft parts at outlet of pelvis.

Treatment of above Causes.

1, By change of posture; 2, by rupture of mem-

branes; 3, counter-pressure; 4, venesection and unctuous applications.

The first order of laborious labors is distinguished by—1, pains advance infant steadily but slowly; 2, strength of woman unimpaired; 3, state of passages natural; 4, action of heart and lungs healthy, skin cool, neither headache, pain, nor retention of abdomen.

Second order of laborious labors is distinguished by—1, pains cease to advance infant; 2, woman's strength begins to decline; 3, circulation quickened, heat increased, thirst, restlessness, headache, &c.

The second order is distinguished from third, by—1, head filling cavity of pelvis; 2, no disproportion between infant and apertures; 3, by absence of all swelling and inflammation of parts in contact with infant.

Rules for Use of Forceps.

The head should be completely or nearly in cavity. There are three standard cases for using forceps—1, face in hollow of sacrum; 2, face under pubes; 3, face to either side of pelvis.

Third Order of Laborious Labors.

The pains have little influence in advancing the infant, which arises from disproportion. This may be from—1, state of infant; 2, the parts lining the passages; 3, the bones of pelvis.

Obstacles from Infant.

1, Unusual size; 2, congenital hydrocephalus; 3, tumor attached to base of cranium; 4, monstrosity; 5, malposition; 6, arm passing down with head.

Obstacles from Parts lining Passages.

1, Excrecence in uterus or at its orifice; 2, scirrhus of cervix uteri; 3, enlargement of ovarium; 4, tumors between vagina and pelvis; 5, collection of feces in rectum; 6, cicatrix of vagina; 7, swelling of soft parts lining pelvis; 8, malformation of external parts.

Obstacles from Bones of Pelvis.

1, Bones naturally too small; 2, bones disproportionate; 3, bones exostosed; 4, rickets or malacosteon.

The most certain evidence of the injurious protraction of labor is tenderness of abdomen or vagina, sometimes preceded by marked and alarming affection of head, also urgent and ineffectual efforts to make water.

Treatment of Third Order.

1, Embryotomy; 2, Cæsarian section; 3, Ligaultian operation.

PREMATURE LABOR.

1, Milk nurse must be provided; 2, earliest period seven and a half calendar months; 3, membranes must not be ruptured till os uteri is fully dilated; 4, practitioner must be in constant attendance.

PRETERNATURAL LABOR.

Of this there are two orders—1, Where lower extremities come foremost; 2, where any other part than head or lower extremities is advanced. In turning, after the water is drained off, a large dose of laudanum must be previously given.

COMPLEX LABORS.

Usually occur in consequence of—1, uncommonly large size of pelvis; 2, rupture at navel; 3, plurality of infants; 4, flooding; 5, convulsions; 6, protrusion of navel string; 7, rupture of uterus; 8, monstrosity.

Where the pelvis is too large, we must—1, attend

from first signs of labor; 2, promote dilatation of os uteri if there be strong forcing pains during first stage; 3, support uterus and vagina.

Rupture at Navel.

If rupture become purple during pains, must turn before membranes burst.

Plurality of Children.

If patient be not exhausted after birth of first child, may wait an hour; if exhausted, turn. After birth of twins, triplets, &c., there is great risk of hæmorrhage on separation of placenta.

Uterine Hæmorrhage during Labor.

1, Flooding previous to or at the very commencement of labor is owing to partial or total separation of placenta, which may be caused by—1, mechanical injury; 2, expansion of cervix uteri from attachment of placenta over it.

2, Flooding after birth of child, previous to expulsion of placenta, arises from partial detachment of placenta, requires immediate extraction.

3, Flooding after the three stages is owing to imperfect contraction of uterus. Premonitory symptoms: uneasiness at back, and lower part of belly, faintings, sickness, and feebleness of pulse.

Convulsions during labor may be dreaded if the patient complain of violent pain of head, crampish pains of stomach, heavy sleep during second stage, sudden delirium (as if in a dream). *Treatment*:—copious venesection; immediate delivery; blistering head; powerful purgatives. Opiates are generally fatal.

Injuries in consequence of delivery are—1, emphysema (gradually disappears); 2, laceration of perineum, labium, vagina, &c.; 3, inversion of uterus, complete or partial; 4, incontinence of urine from, first, paralysis of neck of bladder (blisters); second, mechanical injury; 5, retention of urine; 6, rupture of blood-vessels of labium.

Inflammation of iliac veins is distinguished from phlegmasia dolens by—1, no marked rigor, nor pain of back, nor circumscribed swelling in inguinal region at commencement; 2, pain is in direction of femoral vessels, does not extend to lymphatics, at posterior part of limb; 3, swelling proceeding from below upwards; 4, surface of limb has not the milky whiteness of phlegmasia dolens.

Phlegmasia dolens is owing to inflammation and swelling of internal inguinal glands, caused by—1, mechanical injuries during labor; 2, inflammation from neighbouring part; 3, absorption of acrid lochia; 4, exposure to cold.

SKETCHES OF AMERICAN PHYSICIANS.

NATHANIEL CHAPMAN, M.D.

Professor Chapman is the Sir Henry Hallford of the United States. He is not more distinguished for professional attainments than for courtliness and vivacity of manner, wit, knowledge of the world, and literary taste. His private character forms a marked contrast with that of his late friend and contemporary, Physick, with whom he so long shared the first rank in the profession of Philadelphia. Physick, who shunned general society, and was little known except in professional intercourse, had a reserved stateliness

of manner from which he never unbent. Engrossed by his patients and profession, he seldom entered into the every-day topics of life, and is remembered only as the skillful surgeon and successful operator. Chapman's temperament was cast in a different mould. Eminently social in disposition, with a gaiety of spirit that has not flagged with years, a wit, a punster, delightful as a companion, and enjoying company, he has, for a long period, occupied a position, we may say, unrivalled in the society of this city. To these brilliant qualities he unites the kindest feelings. His wit is without malice, and he is frank, open-hearted, and open-handed. It is not, then, surprising that he is individually as popular as he is professionally eminent.

Dr. Chapman was born in Fairfax county, Virginia, on the 28th of May, 1780, and has, therefore, nearly completed his sixty-second year. His paternal ancestor came to Virginia with the first colony, was a captain of cavalry in the British army, and, according to an authentic tradition in the family, was the youngest son of a cousin german of Sir Walter Raleigh. The family settled on the river Pomunkey, some twenty miles from Richmond; but the branch from which the doctor is descended migrated about a century and a half ago to Maryland, and fixed itself on an estate on the banks of the Potomac, nearly opposite Mount Vernon, which is still in their possession. The doctor's father, however, went to Virginia, upon his marriage, where he afterwards remained.

Dr. Chapman received his early education at the Classical Academy of Alexandria, D.C., founded by General Washington, where he was six years. He subsequently spent a short time in two colleges, though not long enough to owe either any obligation. He came to Philadelphia in the autumn of 1797, to commence the study of medicine with the late Professor Rush, of whom he became a favorite pupil. He continued three years with Rush, and in attendance upon the lectures at the University of Pennsylvania, from which he received his degree in the spring of 1800. The doctor's thesis was on hydrophobia, written, we have been told, at the request of Dr. Rush, in answer to an attack upon his favorite theory of the pathology of that disease. Dr. Chapman had, we believe, previously prepared another thesis, on the sympathetic connections of the stomach with the rest of the body, which he afterwards read before the Philadelphia Medical Society. This contained the substance of the peculiar views on fever and other diseases, as well as the *modus operandi* of medicines, which he has since taught. While a student, Chapman found time to become a frequent contributor to the *Port Folio*, a magazine of some celebrity in its day. His contributions, under the signature of Falkland, had considerable popularity.

In 1801 he went abroad, and spent four years, chiefly at Edinburgh and London. He remained a year in London, the private pupil of Abernethy, and thence passed to Edinburgh. Edinburgh was then celebrated equally for her school of medicine and her literary and scientific society. Students of medicine resorted thither, as now to Paris, from all parts of the world. Nearly all our American physicians of the olden time—Morgan, Shippen, Kuhn, Rush, Wistar, and many others—received their education at Edinburgh. It may

be supposed that Dr. Chapman made the most of his opportunities in the distinguished circles of the modern Athens. He was enabled to see not a little of the eminent persons of those days, and enjoyed considerable intimacy with Dugald Stewart, the Earl of Buchan, and Brougham,* then a fellow student.

Before his departure from Edinburgh Lord Buchan gave him a public breakfast, on the birth-day of Washington, at which a number of distinguished persons were present, when he took the occasion to entrust him with an interesting relic, valuable from a double historical association. Lord Buchan had presented to General Washington a box made of the oak that sheltered Sir William Wallace after the battle of Falkirk, with a request "to pass it, in the event of his decease, to the man in his country who should appear to merit it best." General Washington, declining so invidious a designation, returned it by will to the Earl, who committed it to Chapman, to be delivered to Dr. Rush, with a view to its being ultimately placed in the cabinet of the college at Washington, to which General Washington had bequeathed a large sum.

Dr. Chapman returned to this country in 1804. He established himself in Philadelphia, where he soon afterwards married. His attractive manners and reputation for talent secured his almost immediate success in practice. He became the favorite physician of a large portion of the higher classes of Philadelphia, and has continued for more than thirty years to occupy this position. He was the physician and confidential friend of the Count de Survilliers (Joseph Bonaparte), during his long residence in Philadelphia and its vicinity. From the Count he gathered a large fund of interesting anecdote of the illustrious brother of the ex-king, and the men and scenes of his eventful times, from which the doctor occasionally draws. In his day, Dr. Chapman has seen much of the prominent statesmen of the United States, and, though never entering into politics, he is familiar with the personal history and character of most of our public men. He was summoned to the death-bed of General Harrison, though too late to assist in the treatment.

As a practitioner, Dr. Chapman is distinguished as much for the charm of his manner in the sick chamber as for skill and success in prescribing. His lively conversation and ever-ready joke are often more effective than anyodyne or cordial. Indeed, in cases of trifling importance, the doctor sometimes prescribes little else. In pleasant chit-chat, both patient and physician forget the object of the visit, and the doctor will depart and "leave no sign" for pill or bolus. But, when roused by symptoms of actual severity, Dr. Chapman is almost unequalled in resources, as he is devoted in attentions. Hence, as a consulting physician, his great powers are particularly conspicuous. Rapid and clear in diagnosis, inexhaustible in therapeutics, self-relying, never discouraged, never "giving up the ship," he is the physician of physicians for an emergency.

* In 1809, Dr. Chapman republished here Lord (then Mr.) Brougham's Speech before the House of Commons on the British Orders in Council, with a biographical sketch of him, in which he predicted his future eminence. Lord Brougham was then quite a young man, little known in this country.

Dr. Chapman is best known abroad as a writer and a lecturer. Not long after his return home, he published a work entitled "Select Speeches, Forensic and Parliamentary," with critical and illustrative remarks, in five 8vo. volumes, which attracted much attention. He has since, however, confined his pen to scientific topics. The year of his return, 1804, he gave a private course upon obstetrics, which proved so popular, that, in 1806, at the age of twenty-six, he was elected adjunct to the chair of midwifery in the university, and soon afterwards to that of the materia medica. His colleagues of that day, Shippen, Rush, Wistar, Physick, James, are gone, and he remains the senior professor in the university, and, doubtless, the oldest lecturer on medicine in America. The course of lectures on materia medica is beyond the memory of the writer of this sketch. The views and arrangement adopted by the lecturer may, however, be inferred from his "Therapeutics," to which allusion will be made. At the death of Rush, in 1812, Chapman was transferred to the chair of theory and practice, which he has ever since filled.

The lectures of Professor Chapman, annually delivered to large classes, during a period of thirty years, are of course familiar to no small portion of the profession of the United States. We but reflect general opinion, in pronouncing them erudite, elaborate, and highly finished compositions, enriched with the stores of the most varied reading and of ample personal experience. The professor has, we believe, continued to retain, as the basis of his course, the original draft at first prepared, although many lectures have been rewritten, and the whole often remodelled. Keeping pace with the progress of medical science, Professor Chapman is yet slow to adopt, certainly to give currency to, what are termed the novelties of the day. On a few subjects, his opinions differ from those generally received. His views of fever are of the ultra-solidist school, and of course at variance with the prevailing doctrines. It is foreign to our purpose, however, to canvass these points critically. Dr. Chapman's delivery of his lectures is animated and emphatic. His voice is clear, not of great volume, but so highly pitched as to seem loud. A slight nasal intonation gives it a peculiarity, not unpleasant when the ear has become familiarised to it.

In addition to his courses at the university, Dr. Chapman for a long period gave clinical lectures in the hospital of the Philadelphia Almshouse. He has, moreover, for upwards of twenty years delivered a summer course of lectures in the Medical Institute. This institution was founded by Dr. Chapman, although, as we learn, he has never participated in the fees, or exercised any control over the appointments to the chairs. In days of yore, the doctor was a leading debater at the Philadelphia Medical Society, when the floor of that society was a field in which the ablest members of the profession met in earnest and often vehement discussion. Dr. Chapman has several times filled the honorable post of president of the society. He is now the senior vice-president of the American Philosophical Society, and has, we believe, been chosen corresponding member of most of the learned societies of Europe.

Dr. Chapman's principal work is his "Therapeutics," published in 1817. It has gone through seven

editions, one surreptitious; but the doctor has since refused to have it reprinted, until he finds time to bestow on it a thorough revision. The "Therapeutics" has enjoyed a long popularity. It is written in a very attractive style, and, as is well known, is thoroughly impregnated with most of the peculiar and original views of the author. It is perhaps hardly necessary to observe, that some of these are not in accordance with the opinions of a large portion of his professional brethren—as, for instance, the theory of the *modus operandi* of medicines.

In 1820, Dr. Chapman commenced the publication of the "Philadelphia Journal of the Medical and Physical Sciences," which he continued to edit for many years. The journal was undertaken with liberal views—the doctor never receiving a salary for his services. He has since been an occasional contributor to different periodicals. A large number of his lectures have been published in the previous volumes of this journal—elegantly written and standard monographs on a variety of subjects.

We feel that this sketch does very imperfect justice to one of the brightest ornaments of the profession. It has, however, the merit of being executed in a spirit of entire candour.—*Medical Examiner*, No 21.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, OCTOBER 1, 1842.

In the preceding pages we have given as complete an account, as we were able to obtain from official documents, of the provincial medical schools of the United Kingdom, and of the regulations adopted by the principal corporations or other bodies duly authorised to confer licenses to practise in medicine.

The number of provincial schools is considerable; some of them we have omitted, from being unable to collect the necessary documents; but we are rather under than over the mark in estimating them at twenty-six.

One of the first reflections suggested by an examination of our list is, that while the provincial schools of medicine, properly so called, continue to hold their ground, the number of schools established in the three capital towns of the United Kingdom is gradually diminishing. In London, the school so well and so favorably known under the name of Grainger has ceased to exist; so likewise have the establishments rather ambitiously clothed with the names of Hunter and Sydenham. The only private schools which continue to drag on a species of semi-existence are the Aldersgate-street school, the school of Mr. Lane, and the school of Mr. Dermott. The "dissecta membra," however, still struggle to sustain a portion of the glory or notoriety which the force of events is wresting from them, and we have a multitude of *ci-devant* professors who generously devote their time and talents to the more humble, but, alas, equally

unprofitable occupation, of lecturing to the empty cane-bottoms of their private dwellings. In Dublin and in Edinburgh the same fate has swept away many of the private schools, and it is with much difficulty that even the corporate and privileged establishments withstand the decay under which their less favored rivals have ignominiously perished.

Two principal causes may be assigned for this unwholesome complexion of the professorial market. In the first place, the number of medical students is annually decreasing. Parents begin to find that the medical profession, overstocked in every corner of the kingdom, treated with contempt by the authorities, and pilfered in every possible way by the public, is not the royal road to honor and wealth which it was once supposed to be; hence, the industrious pursuits of the rising generation are directed to other and more profitable channels, and the pupils in lecture-rooms are, like angels' visits, "few and far between."

In the second place, the number of students who visit the capitals of England, Ireland, and Scotland, is very considerably influenced by the competition of the provincial schools; and this influence, as we predicted long ago, is increased with every passing year. The council of the College of Surgeons endeavoured to check the progress of the provincial schools as long as they were able; but the injustice became too crying, and they were forced to yield. At these schools the student may now complete his surgical education without attending a single lecture in London; and it is not to be wondered that parents should prefer keeping their children under their own immediate control, rather than expose them to the temptations and corruptions of a distant metropolis.

Besides this, the late regulations of the College of Surgeons, relative to hospital attendance, must contribute still further to the prosperity of provincial schools, by rendering the sojourn in London longer and more expensive to the pupil. Henceforward, no candidate will be admitted for examination at Lincoln's-inn-fields, unless he has attended a recognised hospital during the full period of four years. Now it is evident that very few medical students can afford to devote four years to a London hospital, the fees for attendance on which, though reduced of late, are still most exorbitant.

Every student residing in or near any of the recognised provincial hospitals will, henceforward, pass these four years in the provinces, and the only recruits on which London can count are those who reside in villages or towns at a distance from cities, and, therefore, may be indifferent whether they proceed to the metropolis or to the provincial schools in their neighbourhood.

The regulation to which we have just alluded will not only have the effect of diminishing the number of students in London, but must also influence, in no

small degree, the annual number of licentiates admitted by the College of Surgeons.

Taken in connection with medical education, we by no means disapprove of this rule; nor do we regard the term of four years as too long for the student to devote to clinical medicine and surgery; we merely notice the effects which it must eventually produce, and not the least desirable of these will be the converting the college into warm advocates for medical reform. This, we say, must eventually occur; for as the number of students, deterred by four years' hospital practice, will seek their licenses from other and less expensive sources, the college, attacked in its tender point must demand, in its own defence, uniformity of qualification, and must yield, in return, equality of privileges throughout the United Kingdom.

We had intended to extend these remarks to the various points connected with medical education, and to a view of the progress of medical affairs during the last twelve months; but the space which we have devoted to the schools and licensing bodies, in the first part of the Journal, compels us to conclude.

REVIEWS.

A Bed-side Manual of Physical Diagnosis. Second Edition. By CHARLES COWAN, M.D. London: Sherwood and Co., 1842. pp. 100.

One of the great difficulties with which the medical man has to contend, in the practice of his art, is that of determining the true relation which exists between external symptoms and internal lesions—in other words, of discovering the nature and seat of a complaint through its remote effects on the economy. The causes of this difficulty are so manifest, that it seems strange practitioners had not recourse, long ago, to the only true mode of obviating it—viz., the employment of physical exploration as an aid to what has been termed the *rational* signs of disease. As long as the physician confines himself to the latter, his diagnosis must always partake more or less of the uncertainty depending on a mode of reasoning which connects together trains of phenomena having no material relation of cause and effect; but the physical signs lead him at once to the seat of the lesion which he seeks, and reveal to his senses a knowledge of various facts indicating its nature, extent, and relations.

It were superfluous for us to dwell on the necessity of a correct diagnosis for the successful practice of the healing art; but we cannot insist too strongly on the advantages to be obtained, in our investigations of disease, from a proper application of the physical method in all cases to which it is suited.

The work of Dr. Cowan contains, in a very brief space, a correct, and, at the same time, most complete exposition of this method, which he has applied to every portion of the human frame where it could

in any way serve to elucidate either the seat or nature of disease. Divested of everything which is not in the strictest sense practical, and enriched by the fruits of enlightened experience and extensive literary research, this unpretending manual is a store-house from which the medical practitioner may draw an inexhaustible stock of useful information.

We have read every line of it with pleasure and with profit, and have found only one which we would willingly see erased—the one in which John Harrison Curtis is quoted as a surgical authority by the eloquent and unwearied oponent of quackery and quacks. Dr. Cowan, above all others, should be mindful of the motto, "*Procul este.*"

NEUROSIS OF THE VULVA.

M. Tanchon describes, under the title *neurosis of the vulva*, severe, obstinate pains experienced in the vulva, while the part on examination appears to be healthy. He distinguishes them into primitive, secondary, and essential. Primitive *neurosis* depends on a cause acting directly on the vulva or its nerves—such as the violence of a first connection, inflammation, or ulceration; of this form he details a case occurring in the person of a female, thirty-eight years of age, who had been violated two years previously, while laboring under stupefaction from intoxicating liquors. Inflammation and ulceration followed, but the accompanying pain increased, instead of diminishing, on their removal. Her sufferings consisted in a burning heat experienced at the orifice of the vulva, propagated to the sphincter ani, but not increased by the passage of the urine. The vulva was natural, with the exception of a blind fistula passing down from it to near the bowel, the incision and cicatrization of which relieved the patient for a few days, but the pain speedily returned, and proved indomitable. The aconite appeared to do most good. Secondary *neurosis* is induced by an affection of the womb or its cervix, the ovary or rectum. It is governed entirely by the primary disease, increasing with its increase, and disappearing when it is cured. The pain is felt on the slightest touch, the passage of the speculum, or finger, sexual intercourse, &c. M. Tanchon describes as essential *neurosis*, those vulvular pains which are felt at the period of the cessation of the menses, unconnected with any organic disease of the part or of the neighbouring organs. This pain is relieved rather than increased by the touch, and thus creates a continual desire for manipulation.

The *neuroses* of the vulva are not more amenable to treatment than those of other parts of the system. Antispasmodics, anodynes, and astringents may alleviate, but time is most to be relied on. The secondary *neurosis* is curable by the removal of the cause which produced it.—*Gazette des Hôpitaux*, July, 1842.

UNIVERSITY OF EDINBURGH.

Dr. Allen Thomson has been elected professor of the theory of physic, in the place of Dr. Alison, who has succeeded to the chair of Dr. Home.

RETROSPECT OF THE MEDICAL SCIENCES.

MINUTE ANATOMY OF THE SPLEEN.

M. Bourguery, who has recently devoted much time to microscopic investigations of the minute anatomy of the frame, having examined a large number of human and other spleens, states that they consist of vesicular membranes, blood-vessels, floating vascular corpuscles, a granulo-capillary apparatus (champ granulo-capillaire) a splenic fluid, splenic glands, lymphatic vessels, nerves, cellular tissue, and an enveloping membrane. The first five of these compose the vesicular apparatus, the sixth and seventh the glandular, and the last three the general texture of the organ.

The splenic vesicles are found in every part of the spleen, separated by membranous walls, and of a spheroid or ovoid shape when the spleen is fully injected, of an irregular poly-hedral figure of from five to ten sides, when the organ is inflated. The former is probably the true shape, as during life the liquids fill the vesicles, glands, and vessels. They vary much in volume not only in different animals, but in the same spleen. In man they are smaller and more regular. In general, their medium diameter is from one to one and a quarter of a millimetre, and they do not vary one third of this dimension more or less. These vesicles do not form simple cavities, being traversed by vessels covered with the enveloping membrane, which form crescentic folds to the extent of one third, one half, or the entire diameter of the vesicle, by which a series of subdivisions of the cavity are formed, at the bottom of which are found the glands, granules, and capillary arborizations in relief. They have two kinds of orifices, one of communication, *inter se*, which is irregularly circular, with its edges formed by a fold or reflected membrane from the parietes. The larger vesicles have two or three, the smaller ones have one at least, this free communication between the vesicles enabling the anatomist readily to inflate the organ not only by the veins, but by any opening made on its external surface. The orifices of communication with the veins are not so numerous as those just described; some vesicles will have two or three, while several others close by have not one between them. These orifices are circular or ellipsoid, and possess an incomplete crescentic valve. They are about one-twelfth of a millimetre in diameter in man. They form the absorbent mouths of veins of the same size, which are connected with those of the intervesicular spaces.

The intervesicular spaces are formed by the separation of the enveloping membranes, and contains the vessels and splenic glands; their size depends on the degree of repletion of the vesicles. These spaces are enlarged irregularly between several vesicles, and are filled with glands.

The enveloping membrane constituting the parietes of the vesicles, is one continuous membrane throughout the entire extent of the spleen, and may be regarded as divided into a number of small isolated ampullæ, and supported by the ramifications of the vessels and by the glands. The organisation of the vesicular membrane is very complicated, as it encloses the granulo-vascular membrane with its thick network of blood-vessels and lymphatics.

M. Bourguery divides the blood-vessels into three orders—the splenic, intervesicular, and the vesicular. The splenic artery and vein divide into three or four branches, which pass directly to the surface of the organ; the veins, which are much the larger, are pierced with a number of small foramina, opening into the veinulæ of the spaces; the terminal veins according to the length of their canals, end in a succession of cellules, separated by vascular bands, the organic composition of which is absolutely identical with that of the vesicles in which they terminate. The intervesicular vessels, arising from the preceding, are distributed to the glands and intervesicular membrane in the spaces. The vesicular vessels form the falciform folds already spoken of in the interior of the vesicles. Their branches project into the cavity to be distributed to the floating vascular corpuscles, resembling a bunch of grapes. On the fundus of the membrane, the terminal capillaries form the granulo-vascular network with the lymphatics. There are two kinds of veinules, the capillules of the common network, and the veinules of absorption, which are much larger than those that open into the vesicular cavities. All the small vessels of the spleen, whether of the spaces or vesicles, are distinguished, when distended, by a continued series of swellings and contractions, which give them a well-marked knotted aspect.

The floating vascular corpuscles are contained in the interior of the vesicular cavities, where they depend, as from a pedicle, from the terminal branches of the capillary lymphatics and blood-vessels. They are formed by a lenticular nucleus, whence spring in the turgid state, small aigrettes radiating towards the circumference. These aigrettes are composed of a filament terminated by small brilliant spherules, collected in the form of a chaplet. The corpuscular nuclei are of unequal shape, and about fifteen to sixteen times the size of the diameter of the blood globules, and their capillaries have a calibre of 3.100 of a millimetre.

The granulo-vesicular membrane is composed of two elements: first, of pale spherical granules in juxtaposition, equal in diameter to four or five globules of blood, and of arterial, venous, and lymphatic capillaries. The splenic liquid or blood appears to be the product of elaboration by the floating corpuscles and the granulo-vesicular membrane; it is deposited in the vesicular cavities, whence it is taken up by the absorbent veins of its parietes. It is thick, viscid, of a reddish brown color, and under the microscope it appears to be composed of several kinds of globules held in suspension in a yellowish and unctuous liquid—viz., lenticular globules—some red, which do not appear to differ from the ordinary blood globules, others colorless, and whitish irregular globules, resembling those met with in the chyle and lymph.

The splenic glands united by cords of the same substance, with the ramifications of the vessels, fill up the inter-vesicular spaces; their greatest diameter in a state of repletion is about a quarter of a millimetre in man. In a bullock's spleen, where they are about two millimetres in diameter, they can be seen with

the naked eye in the form of brown or whitish corpuscles. M. Bourguery believes these to be the glands spoken of by authors as the vesicular glands of Malpighi. These glands isolated or agglomerated in the spaces according to their size, are united by their cords into the form of chaplets, and receive a great number of lymphatics and blood-vessels. When magnified to 200 or 500 diameters, they appear to consist of granules and infinitely small capillaries. The lymphatics form a network on the surface of the gland, whence an afferent vessel penetrates its substance, subdivides into innumerable ramusculæ, forming the principal part of the gland, and terminating in an efferent vessel, which passes to the vessels of the intervacular space. From these facts, M. Bourguery concludes them to be microscopic lymphatic glands. The microscopic lymphatic vessels arise from the granulo-capillary membrane, where they form a very close network; they unite to compose fifteen to twenty larger trunks, which enter the glands of the spaces. Their diameter is from 5. to 8.100 of a millimetre. The larger branches are provided with valves, and have enlargements, which at the points of anastomosis, resemble rudimentary glands, as if they were not only vessels for carrying the lymph, but also bore a part in its elaboration.

According to Malpighi, the spleen was composed of cellules separated by spaces; in the cells existed granulations pendent from the extremities of the arteries and nerves. The veins and arteries opened into the cellules by gaping orifices. The spaces were formed by a parenchyma, formed of fibrous and muscular bands, and contained a thickened and extravasated blood. Ruysch admitted the existence of the membranes, but denied that of the fibres and cellules, and assigned another use to the granulations. Winslow spoke of a cottony tissue, and admitted the cellules and granulations, but did not allude to the vascular capillaries. Haller acknowledged only the cellules and granulations; a little later Assolan denied the existence of the cellules, and still later Meckel wrote against the cellules, and Cruveilhier against the granulations in man.

From these details, it appears that the spleen is composed of two distinct apparatus, the vesicular and the glandular, divided into little organules, in juxtaposition throughout the entire organ. Of these, the vesicular apparatus constitutes three-sixths of the spleen; the glandular, two-sixths; the remaining one-sixth being formed by the vascular arrangement. The vesicular apparatus or succession of vesicles, is continuous throughout, inter se by orifices of communication, and comprises the splenic veins, the corpuscles, and the granulo-capillary membrane. It constitutes a long canal, everywhere folded on itself, and divided by vascular bands into myriads of little cavities to increase the surfaces. The texture of these vesicles and the nature of the liquid they contain cause them to be regarded as an apparatus for the elaboration of the blood.

The glandular apparatus is composed of glands and lymphatic vessels. It consists of a tortuous chain of glandules connected by cords of the same substance, and situated between the vesicular ampullæ. It may be regarded as one large lymphatic gland, broken down into smaller ones, in order to surround the ves-

sels throughout the entire extent of the spleen. The capillary blood-vessels assimilate somewhat in texture to the organ itself, the veins forming part of its tissue, and participating in its functions, while the lymphatics appear to be not merely vessels for transmitting the lymph, but at the same time organs for elaboration. The anatomical arrangements are the same throughout the mammifera, but in man they are more precise and defined, marking the perfection of the organ, which is much more simple in its organization in animals.—*Gazette Medicale*, June, 1842.

THE ACTION OF NITRATE OF SILVER ON THE SKIN.

Dr. Patterson, physician to the Rathkeale Infirmary and Fever Hospital, has conducted a series of experiments on the influence of the nitrate of silver, and of the ioduret of the same metal as its substitute. The nitrate has been found of service in epilepsy, chorea, pyrosis, gastralgia, and angina pectoris; it has been strongly recommended in phthisis and leucorrhœa; but the great objection to its use is its liability to stain the skin of a blueish black or indigo hue, a result attributed by Dr. A. T. Thomson to the nitrate being taken into the circulation undecomposed, and arriving in that state in the capillaries of the skin, where it is decomposed, and converted into the chloride, which is deposited in the rete mucosum. The chloride, he says, acquires a grey leaden color, from its contact with animal matter, and, as it is insoluble, it is incapable of being reabsorbed, is fixed in the rete mucosum, and a permanent stain is given to the skin. To produce this effect, a more than usual quantity of hydrochlorates must be separated by the cuticular capillaries. This explanation Dr. Patterson deems erroneous; his experiments show that the nitrate is readily decomposed by the saliva, by the simplest articles of diet, and by the healthy and diseased secretions of the stomach itself, so that it cannot pass into the circulation as the nitrate, but in some other combination, to which, therefore, must be attributed its beneficial and curative effects. This new compound Dr. Patterson believes to be the chloride, nor does he admit the plea of its insolubility to operate against it, as many potent remedies—for instance, calomel, ioduret of mercury, sulphur, trisnitrate of bismuth, bisulphuret of mercury—are equally insoluble. The internal administration of the chloride would, therefore, be the more advisable prescription, were it not that the liability of the patient to discoloration of the skin continued in full force. That result would follow whether the chloride was prepared in the human stomach or in the chemist's laboratory.

The discoloration is attributed by Dr. Patterson to the decomposition of the chloride of silver circulating in the cutaneous tissue through the chemical action of the sun's light, and the deposition there of its metallic basis in a state of extreme disaggregation. All persons are not subject to this accident, for the influence of the sun's rays can only be effective in those cases where the cutis is more than ordinarily vascular, and is clothed with a thin transparent cuticle.

Physiologists are of opinion that the absorbents possess a functional power of selection or elective attraction—selecting and imbibing some substances, and rejecting others, through the exercise of their

own independent sensibilities, and in accordance with unknown laws. In this way only can the permanence of the stain be accounted for, the metals being a class of substances for which the absorbents have no attractive affinity.

Dr. Patterson instituted a series of experiments on the ioduret of silver, which tend to show that the sun's rays have not any decomposing influence on that salt, and that, consequently, its internal administration is not likely to be attended with the production of the discoloration of the skin, caused when the nitrate has been administered for any length of time. He has tried it in pyrosis and gastralgia with advantage, and has found it apparently of service in two cases of epilepsy.

He has found a solution of hydriodate of potash remove the stain produced on the skin by the external application of the nitrate of silver, and destroy the color of an ointment of the chloride of silver, which had assumed a dark brown tint from exposure to the sun's rays, and has further ascertained that nascent iodine will remove the writing of indelible marking ink, made with the nitrate, and then concludes somewhat hastily, that in those cases where the skin has become discolored from the long use of the nitrate, the discoloration may be removed by the internal and external employment of suitable preparations of iodine.

Ioduret of silver is easily obtained by adding to a solution of the nitrate in distilled water a solution of hydriodate of potash in atomic proportions. If 164 grains, or one proportional of ioduret of potassium, be dissolved in two or three ounces of distilled water, and 172 grains, or one proportional of nitrate of the oxide of silver, be dissolved in two or three other ounces of distilled water, on mixing the solution, 234 grains, or one proportional of ioduret of silver, are precipitated. The whole is then to be thrown on a filter, and the ioduret of silver should be washed with repeated affusions of rain or distilled water, and then dried in the sun or before a fire. If the ioduret of silver, so formed, be in the slightest degree contaminated with any nitrate of silver remaining undecomposed, it will be liable to discoloration. It is best then to use the ioduret of potassium in very slight excess; and for facility of practice, equal weights of each salt may be employed. Ioduret of silver, thus prepared, is a soft rich-looking, granular powder, having the beautiful pale greenish yellow color of the canary bird. It has neither taste nor smell, and is insoluble in water; it resists the action of the diluted nitric, hydrochloric, and acetic acids, of the alkaline subcarbonates and of hydrochlorate of soda; it is very sparingly soluble in solution of hydriodate of potash.

From the insoluble nature of the ioduret of silver, and the smallness of its dose, the form of pill seems best adapted for its exhibition. It should be reduced to the state of the finest powder possible, which is not easily effected on account of its possessing a certain degree of coalescence, that causes it to adhere to the pestle. For that reason, and for its more exact subdivision, it is necessary to triturate it with a few grains of some compatible salt. It is also of advantage to add a little liquorice powder to give some bulk to the pills, and a little sugar or syrup to prevent them from becoming too hard.—*Dub. Med. Press*, Aug. 24, 1842.

STONY PLACENTA.

A singular case is recorded by Madame Buisson Dauthez, a midwife, at Paris, under this title. Her patient was delivered in February last of a living female child, which did well. The delivery was somewhat retarded by the size and consistence of the placenta. It was the patient's third labor.

The placenta was perfectly round; the cord was attached to its centre, and the membranes could be readily separated as far as the root of the cord. The diameter was seven inches in every direction, and it was an inch thick in the centre. The vessels instead of ramifying, as in ordinary cases, terminated in two distinct sinuses for the two orders of vessels. The fetal surface did not present any remarkable appearance, but on that which had adhered to the uterus were remarked distinct lobes, formed by a concrete matter which resisted the scalpel; the color and consistence being that of grey plaster. In order to ascertain how far the spongy substance was filled with this composition, the placenta was washed, and it was ascertained to be formed entirely by distinct concretions, larger at the edges than at the centre, but sufficiently free to allow of their separation. The accomplishment of the delivery without very great difficulty was owing to this mobility of the concrete lobules.

The patient had not experienced any of the strange whims which infect pregnant women, nor had she suffered from gout, rheumatism, or disease of the heart.—*Gazette Médicale*, July, 1842.

SUBCONJUNCTIVAL OPERATION FOR CATARACT.

M. Bernard, of Paris, has published the details of an operation for depression of a cataract, in which he had recourse to the subconjunctival proceeding. The patient, an aged female, was seated in a low chair, the upper eyelid raised by a strabismus levator, and the eye fixed by a hook passed into the sclerotica. The conjunctiva being then drawn upon by another hook, the needle was passed in until it reached the place of election in the sclerotica, when the conjunctival hook being withdrawn, the elasticity of the membrane prevented its interfering with the passage of the needle. The cataract was then depressed in the usual way, and the instrument withdrawn. On examining the eye afterwards, the wound in the conjunctiva could not be perceived until the patient was directed to look inwards, when a slight red point twelve millimetres from the cornea could be distinguished. The patient had neither pain nor other inconvenience after the operation, and recovered perfectly.—*Ibid*, July, 1842.

DEATH FROM DISTENSION OF THE BOWELS.

Dr. Ashmead narrates the case of a man who, after having been on short allowance for a few days, eat voraciously over night of water melon, and drank freely of small beer and cider, and was seized the next morning with violent abdominal pain, vomiting, and constipation. When the doctor saw him, about twelve hours after the commencement of the attack, he had a feeble and frequent pulse; shrivelled skin, covered with a cold clammy sweat; hands and face blue; respiration short and hurried; abdomen enormously distended with gas, tense as a drum, and rising high above the level of the sternum. Dr. Ashmead at once conjectured that there was an obstruc-

tion of the bowels causing immense distension, by which the lungs, heart, and blood-vessels were compressed, and their action impeded; in fact, that the patient was dying from asphyxia, and could be saved only by an immediate evacuation of the gas. Accordingly, having reduced a hernia on the right side, turpentine enemata were thrown up every five minutes, but without affording the relief needed. The patient died in about half an hour; during his last moments the operation of tapping the cæcum was proposed and acceded to, but unfortunately no instrument could be procured until it was too late.

On examination of the body, the lungs were found to be much congested and greatly compressed; the peritoneum over the lower part of the jejunum and ilium much injected and of a dark color, and over the whole of the large intestines it was so dark that it might have been mistaken for gangrene, but for the absence of fætor or softening of structure. The lower half of the jejunum and ilium were greatly distended with gas, and loaded with yellowish fluid feces, and small pieces of indigested vegetable of the size of beans. So great was the distension of the cæcum, that on cutting off the ilium two inches above it, a violent gush of fluid feces and gas took place, attended with a loud noise; the contents of the bowels were propelled to the distance of at least four feet from the body. The colon was also enormously distended; the stricture had involved the sigmoid flexure, the lower part of which and the rectum were perfectly natural. The situation of the part of the bowel strictured was indicated by the abrupt termination of the injected and ecchymosed condition of the bowel. The position of the diaphragm was particularly remarked; the highest point of its peritoneal surface, after the removal of the bowels, was, on the right side, three inches above the nipple or half-way between the nipple and the lower edge of the clavicle; and on the left side one inch above the nipple.—*Trans. Philadelphia College of Physicians.*

ANTHRAKOKALI.

The anthrakokali, a medicine recommended about two years since by Dr. Polya, is prepared as follows:—180 scruples of carbonate of potass are dissolved in 2,500 scruples of boiling water, and a sufficient quantity of slaked lime added to free the potass from the acid. The liquid is then filtered, and evaporated in an iron vessel until it presents an oily appearance, after which 150 scruples of porphyrised charcoal are added, the liquid being stirred the while. The vessel is then withdrawn from the fire, and the preparation continuously stirred with a pestle, until it is changed into a black homogeneous powder, which should be immediately enclosed in heated bottles, and set aside in a dry place.

Thus prepared, it is called simple anthrakokali; it is a black powder attracting moisture, and very soluble in water. Its cold solution is of a deep brown color; treated with a mineral acid, black flakes are precipitated, which gradually unite and form a mass. By mixing fifteen scruples of porphyrised sulphur with the charcoal previously to adding it to the liquid, and then pursuing the same process, the sulphuretted anthrakokali is obtained, a preparation presenting all the characteristics of the preceding, save that its aqueous solution is of a blackish green color.

M. Polya says he has employed these preparations with great success in cases of dartses, scrofula, chronic rheumatism, rheumatic enlargements of the joints, gouty concretions, and hydrarthrosis. The second is the more powerful preparation. He administers two grains three or four times a-day, mixed with liquorice powder or the carbonate of magnesia; occasionally cases occur where it is requisite to combine with it calomel or the oxysulphuret of antimony. M. Gibert has tried it at St. Louis in herpetic eruptions, but not deriving the advantage he expected from its internal use, he decided on employing it in the form of an ointment, made with one scruple of anthrakokali to thirty of lard, which he directs to be rubbed in night and morning on the parts affected. He tried it in eighty cases, all of which improved under the treatment, and several were cured. Its action appears to be discutient.—*Gazette des Hôpitaux.*

FULIGOKALI.

This is prepared by boiling twenty scruples of caustic potass, and 100 of powdered brilliant soot in a sufficient quantity of distilled water for an hour, letting it cool, then diluting it with water that it may filter the more readily, filtering, evaporating, and drying, in order to obtain the fuligokali in scales or in powder, which is then to be enclosed in dry heated bottles. The sulphuretted fuligokali is prepared with sixty scruples of the fuligokali, fourteen of caustic potass, and four of sulphur. The sulphur and potass are heated with a little water; when the sulphur is dissolved the fuligo is to be added, the liquid then evaporated, the product dried, and enclosed in dry heated bottles. These have been employed by M. Gibert, at St. Louis, both internally and externally. The ointment is made with from one to two scruples of fuligokali to thirty of lard, and he considers that it possesses discutient, detersive, and slightly stimulant properties.—*Ibid.*

SMALL-POX IN BRAZIL.

M. Cuissart, a French physician, who has recently returned from Brazil, where he practised for many years, states that in 1837 an epidemic small-pox broke out, and lasted a twelvemonth. At first it was very mild, but in a little while it put on a malignant character, and was attended with formidable symptoms. Notwithstanding the delirium and violence of the fever, all who were blooded either from the arm or by leeches, perished; while of those who were treated by mild general measures, almost all recovered. Those who had been vaccinated were attacked with a varioloid eruption only, and all did well. Those again who had not been vaccinated, had the disease mildly, while all those who had had small-pox previously, died from the attack. The progress of the fever was identical with that described by Sydenham. M. Cuissart states that, in his opinion, vaccination is a better preservative than small-pox itself. He is a contagionist.—*Ibid.*, July, 1842.

INSPECTORSHIP OF ANATOMY.

Some time ago we announced that an investigation had been commenced by government, at the instance of the Council of the College of Surgeons, relative to the conduct of the Inspector of Anatomy. This investigation has now terminated, and Dr. Somerville has ceased to hold the appointment, being replaced by

Mr. Bacot and Mr. R. Alcock. Considerable alterations will, we understand, be made in the arrangements under which subjects are applied.

OBITUARY.

On the 17th instant, at Uxbridge, Matthew Rayner, Esq., surgeon, aged eighty-one.

On the 21st instant, in the seventy-seventh year of his age, Algernon Frampton, M.D. Dr. Frampton had filled the office of physician to the London Hospital during a period of forty years.

PROMOTIONS AND APPOINTMENTS.

MILITARY.

17th Dragoons—Assistant-surgeon David Cooper, from staff, to be assistant-surgeon, vice Leslie, resigned.

NAVAL.

Surgeons—J. Osburn, to the Poitiers; A. Woodcock, to the Volage.

Assistant-surgeon A. Woodcock, to be surgeon.

APOTHECARIES' HALL.

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TO CORRESPONDENTS.

W. A. R.—We shall be glad to receive the case. About one-third of the uterus, including the neck, was removed.

Several papers and cases have been unavoidably postponed until next week.

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Prizes and Honorary Certificates will be given at the end of the Session.

The Introductory Address on the opening of the School for the Session 1842-43, will be delivered by Dr. Goolden, on Saturday, October 1, at Twelve o'Clock.

MIDDLESEX HOSPITAL SCHOOL of MEDICINE.—The WINTER SESSION will commence on Monday, October 3, 1842.

ANATOMY, PHYSIOLOGY, DEMONSTRATIONS, and DISSECTIONS, by E. W. Tuson, F.R.S., Mr. Erasmus Wilson, and Mr. H. M. Rowdon.

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Perpetual Fee to the whole of the Lectures, £45.

The INTRODUCTORY ADDRESS on the opening of the Session will be delivered by Erasmus Wilson, Esq., on Monday, October 3rd, at Two o'Clock.

A Public Distribution of Prizes will take place at the termination of the Winter Session.

In addition to the ordinary Prizes, an Annual Prize of the value of £20 will be awarded for general proficiency.

Clinical Prizes in Medicine and Surgery will be awarded by the Physicians and Surgeons of the Hospital.

A Theological Prize will be offered by the Chaplain of the Hospital to such Students as may be desirous of competing for it.

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For further particulars, apply to the Secretary of the Hospital.

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INTRODUCTORY LECTURE,

DELIVERED AT

KING'S COLLEGE, OCTOBER 1, 1842.

By W. A. GUY, M.B.,

Professor of Forensic Medicine, and Physician to King's College Hospital.

GENTLEMEN.—Since the first establishment of this college, it has been customary to preface the business of the medical session by a general introductory lecture—a plan attended with such obvious advantages, that it is now adopted by most of the large schools of London. Of these advantages not the least is, that it enables the professors through him on whom it devolves to act as their representative, to lay before you such considerations as are most likely to be useful to the members of our class; for of these the present audience chiefly consists, and for these we are bound in duty, as we are led by inclination, to entertain the liveliest interest.

But, though the majority of my audience consists of the junior members of the profession, I am aware that I am honoured by the attendance of some of its older members, and by that of a few of other professions; and I feel that I am bound so to shape my discourse, as that whilst it is useful to the one class, it may not be altogether uninteresting to the other.

Influenced by this consideration I have chosen, as the subject of to-day's lecture, the difficulties which beset the study and practice of medicine—a subject fraught with instruction for the pupil, suggestive of useful reflections to the practitioner, and, as I would fain hope, possessing some attraction for the members of other professions.

The profession of medicine, Gentlemen, is not only one of the most important, one of the most honorable, and one of the most responsible, but the most difficult which offers itself to your choice. If this observation, which I put thus boldly and prominently forward, shall have the effect of intimidating any one, and of leading him to believe that he may have acted unwisely in making choice of such a profession, I trust that the remarks which I am about to make in the course of this lecture will remove any such fear, will re-establish confidence, and will have this good effect—of inducing him to apply himself to his studies with that zeal which they are so well calculated to inspire, and with that perseverance which never fails of being crowned with success.

The difficulties of which I speak beset the medical man at every part of his career. He encounters them, as a pupil, in the school and in the hospital, and he meets with them in after life, whether he devotes himself to the practice of medicine as an art, or to the study of medicine as a science, or combining both of these, converts his opportunities of experience into the means of establishing those general principles, and those accurate standards of comparison, which may become, for his own and for after ages, the guides and the landmarks of experience.

I propose to examine each of these difficulties in turn, beginning with those which beset the path of the pupil. The studies to which he devotes himself are twofold—those of the school or college, and those of the hospital. In the school or college, the pupil will have to attend certain courses of lectures on subjects more or less closely and directly connected with the practice of the healing art; as well as to acquire

a practical familiarity with some of the more important sciences treated of in the lecture-room.

That those who are about to enter upon their medical studies may form some idea of the amount of labour which they will have to undergo, I will merely state that, according to the existing regulations of the medical corporations, no pupil can present himself for examination, without having attended at least sixteen courses of lectures upon nine distinct branches of science; that some of these courses comprise no less than one hundred and forty lectures; and that two of them (anatomy and physiology) are considered of so much importance, that an attendance upon three several courses is enjoined; and that in one winter session the student must of necessity attend no less than five different courses of lectures, and as many as four of them on the same day.

But this statement, formidable as it may appear, exhibits but a part of the labours of the medical pupil. In addition to the attendance upon all these courses of lectures, and the private study necessary to fix them in the memory, the student must spend a considerable part of every day, during, at least, two winter-sessions, in the dissecting room, in order to obtain a practical knowledge of anatomy; he is strongly recommended, and by some of the examining bodies required, to gain the same practical familiarity with the manipulations of chemistry; and, if he have not passed through an apprenticeship, he must exercise himself in pharmacy. There are certain operations and manipulations also, described in the lectures on surgery, midwifery, and forensic medicine, which are so important, that the student will be naturally anxious to practise them with his own hands.

But this is not all. During a great part of the time that he is engaged in attending lectures, and in acquiring a practical knowledge of the subjects which I have mentioned, the student must be in attendance, during some hours of every day, in the wards of the hospital, where he is to acquire such a knowledge of disease as shall enable him to enter upon the practice of his profession with honor to himself, and with safety to the public.

Now all this attendance upon lectures, with the private study which must necessarily go along with it, all these practical studies of the school or college, and all the lessons of experience to be learned in the wards of the hospital, are to be compressed into the narrow compass of three, or, at the most, of four, years; for by far the majority of medical pupils complete their studies in three winter and two summer sessions, and comparatively few devote four years to the study of their profession.

After what I have now stated, it will be easy to point out the source of the difficulties which the medical student encounters in the school or college. It is to be found, on the one hand, in the great number, extent, and variety of the studies which engage his attention; and, on the other, in the short period allotted for the completion of those studies. When it is considered that, in addition to all this scientific knowledge, the student must possess the same acquaintance with classical literature which is regarded as an indispensable preparation for the studies of other professions, I shall, as respects the student, have fully justified the assertion with which I set out, that the profession of medicine is by far the most difficult profession in existence.

In this view of the nature of the difficulties which the student has to encounter, there is, however, nothing to dispirit him. The knowledge which he is expected to possess, though of vast extent, requires the exercise of no peculiar talent. The greater part of it is obtained by the simple exercise of the senses on objects presented to him, and carefully described by the teacher, and retained by an ordinary exercise of the memory; and should he encounter the slightest difficulty, there are always those at hand whose duty and whose pleasure it is to remove it.

There are some pursuits which cannot be followed with success without a degree of talent which does not fall to the lot of all. Thus, there are many men, not otherwise deficient, who can make no progress in the mathematics; others who fail not less remarkably in classical study; whilst, in the various pursuits which call the inventive faculty into play, comparatively few men attain even to mediocrity. The early studies of the medical pupil, on the contrary, call no faculty into exercise which is not possessed in a sufficient degree by men of average understanding and intelligence. Hence there is no room for distrust or despondency, provided the student determines to pursue his studies with diligence and regularity.

That the difficulties attending the studies of the college, though great, are not insurmountable, will appear, from the success which every year crowns the efforts of our industrious students, not merely in gaining a competent knowledge of the several subjects treated of in the lectures, but in attaining such a degree of proficiency as entitles them to receive flattering marks of distinction at the hands of the venerable prelate who, for so many years past, by his presence here, has condescended to enhance their value. But the very persons, whose distinguished success proves the possibility of conquering these difficulties, would themselves be the first to acknowledge that their honors are too often gained at the serious expense of neglecting the practical studies of the hospital, or that, if these are not neglected, it is because they are so fortunate as to be able to devote a longer time to their studies than is usually given to them.

Let it not be supposed that the fact of by far the greater number of medical students obtaining from the various examining bodies authority to practise their profession, furnishes any proof that the difficulties of which I have spoken have been by them surmounted. Those who have watched the practical working of our present system, know full well how often these difficulties are skillfully avoided, how rarely they are fairly met and resolutely overcome; and that no examination but one which presents to the pupil the objects of his study (whether those of the college or hospital), and makes his familiarity with them the test of his proficiency, can serve to distinguish between the superficial knowledge, scraped together only to be forgotten, and that which, having been consigned by the senses and reason to the safe keeping of the memory, is there laid up for the future service of its possessor.

One important corollary may be drawn from all that has been said on the extent and difficulty of the studies of the college—viz., the paramount importance to the medical student of habits of industry. No talent, however brilliant, can compensate for the want of these habits. Many excellent works of imagination have, doubtless, owed their existence to short-lived bursts of enthusiasm; but knowledge is only to be acquired by patient study. Let the pupil, then, aim at the formation of habits of steady application, attending his lectures with scrupulous punctuality, adopting a strict method in his private studies, giving to all his practical pursuits a zealous and sustained attention, and setting his face steadily against all temptations, whether from within or from without, which would allure him from the straight path into which his duty, no less than his interest, have led him.

Before I quit this part of my subject, I would ad-

dress one other word of advice to the pupil. Though he may have made up his mind to pursue his studies with the requisite perseverance, and though he perform his resolution to the full, he may yet fail of his object, if, forgetting the many claims on his attention, he devotes himself too exclusively to one or more favorite objects of pursuit. He should recollect that there is not time enough to become a minute anatomist, or a profound physiologist, or an accomplished chemist; and that in aiming at a high degree of proficiency in any of these sciences, he must, of necessity, neglect other subjects, which, to one who intends to become a practitioner of the healing art, are of much higher importance. By this unwise preference of one subject over another, where all are requisite, and all in their turn important, the industrious and deserving pupil has sometimes shared the fate and suffered the mortification of the idle and dissolute. This advice applies, without any exception, to the student, for whatever department of the profession he is ultimately destined.

I now proceed to say a few words on the studies of the hospital. The studies of the school or college, even those which seem most remote from practical application, are intended to prepare the pupil to profit by the opportunities of experience afforded him in the wards of the hospital. The lectures on therapeutics, on the practice of medicine and surgery, and those on the diseases of women and children, which form part of the course on midwifery, are the more immediate preparation for hospital attendance; and I would impress on the pupil the great importance of attending diligently to the instructions of the professors in these departments. By so doing, the difficulties which he must of necessity encounter will be materially diminished, and the advantages to be derived from his attendance at the hospital will be greatly enhanced.

The studies of the hospital, like those of the college, embrace a vast amount of details, and demand a proportionate amount of application. It is by no means easy to convey to the younger pupil an accurate idea of the extent of the knowledge to be acquired, or of the time necessary for the attainment of it. Our more advanced pupils, however, who have already completed the studies of the college, possess, in their experience of those studies themselves, a measure of the amount of labor which awaits them in the wards of the hospital. They have only to call to mind the great variety of topics embraced in the courses of lectures which I have already pointed out, as forming the more immediate preparation for the studies of the hospital, and to reflect that, of all these topics, they are expected to acquire such a practical knowledge as shall form a secure foundation for their own safe and successful treatment of disease, in order to perceive the full extent and difficulty of the task which they have undertaken to perform.

They can scarcely pass a day in the wards of the hospital without perceiving the vast difference which exists between the best descriptions of disease which they have read in books, or heard in the lecture-room, and disease itself. These descriptions may be as faithful as pen or tongue can make them, but they still want the vivid reality and minute coloring of nature. At the best, they are merely an assemblage of those phenomena which occur in the most marked forms, or, in the majority of cases, of disease, and they must often bear but a faint resemblance to any individual case. Now, it is with individual cases that the practitioner has to do, and it is only by repeated observation of the same disease, as it is varied by sex, age, peculiarity of constitution, previous habits of life, and many other modifying causes, that he obtains experience. It is these original and acquired differences between man and man, added to the varying intensity of the causes of disease, and the different, and even opposite, modes of treatment adopted, that render disease so intricate a study, and medicine in so especial a manner a science of obser-

vation. From what I have now stated, it will appear that a long attendance at the bed-side is necessary to prepare the student for the practical duties of his profession, and that without this, the most accurate knowledge of all the sciences taught in the school, aided by the most diligent study of the best practical authors, will avail him little or nothing.

The difficulties which the pupil encounters in the wards of the hospital are similar to those which he has already met with in the studies of the college. The studies of the college, as I have stated, turn chiefly on objects submitted to the senses in the form of preparations, models, experiments, or diagrams, which objects of sense are carefully described by the teacher. The studies of the hospital give still more constant employment to the senses, and, at the same time, call into play the reasoning faculties, which have, in the studies of the college, a more limited, though still an extensive, application. In every case of disease the symptoms present are but an index to the internal changes which constitute the essence of the disease, and these faculties must be constantly exercised in tracing the symptoms back to their source, and in fixing upon them their right interpretation.

In the necessity for a constant and active exercise of these higher faculties of the mind, we recognise the source of greater difficulties than those which the pupil encounters in the studies of the college, and surpassing those of many other professions. But there is one consideration which prevents me from classing this among the principal difficulties which the pupil encounters in the hospital; and that consideration is, that he constantly receives the most valuable assistance from the observations of the physicians and surgeons of the hospital at the bed-side of the patient, as well as from the more formal clinical lectures delivered at short and stated intervals. These familiar instructions forming, as they do, a connected commentary on disease at every stage of its progress, give such important assistance to the pupil, and tend to form by degrees so secure a habit of observing and reasoning, that difficulties lessen almost imperceptibly, and soon entirely disappear.

It would not be difficult to discover, in the studies of the hospital, other sources of difficulty; some of these, indeed, will be considered when I come to speak of the study of medicine as a science, and its practice as an art; but the one great source of difficulty to which I would invite the attention, not of the pupil only, but of the profession generally, is the disproportion existing between the amount of knowledge to be acquired, and the limited time allowed for its acquisition. To this source I have already traced the only difficulties attending the studies of the college, which the complete arrangements for teaching and the zeal of the professors cannot remove; and to the same source I refer the only real difficulties which, in spite of the improved arrangements for clinical teaching now adopted in most of our hospitals, still lie in the way of the student.

The chief difficulties which the pupil encounters in the college and in the hospital being thus traced to one and the same source, the practical inference already insisted upon gains additional force—viz., that steady, persevering, unwearied industry, is the bounden duty, as it is the undoubted interest, of the medical student. Without industry in the college, he will be ill prepared for the studies of the hospital; without industry in the wards of the hospital, I know not how he can dare to take upon himself the awful responsibilities attending the practice of his profession.

Still, with all the pupil's industry and application, the time usually devoted to study is insufficient to enable him to accomplish all he ought to aim at. Let him reflect that he requires not only knowledge, but the appearance of knowledge—not sound principles merely, but the power of readily applying these principles to individual cases. During the early part of his career as a practitioner more especially, and before

he has had time enough to gain with the public the reputation of experience, it is of the first importance to his own success in life that he should approach disease with the air of one who is practically conversant with it, that he should put his questions as if he were in the habit of asking them, and use his hands as if he were in the habit of employing them. By this means he will sooner gain credit for experience, and enjoy the confidence of the public, which follows fast upon such a reputation. This result, so important to his success, is only to be obtained by a long and patient attendance at the bed-side.

But I would urge the student to industry by a higher motive than that of self-interest—the motive of duty. It is his duty to be prepared for every emergency which may arise in the branch of the profession which he has chosen, and even in those which he does not profess to practise. The general practitioner, more especially (and for this department of the profession the majority of medical students are destined), must be ready to act in every emergency the part of the physician, the surgeon, and the accoucheur. Let me advise the pupil, therefore, to pay regular and zealous attention to the studies of the hospital; not the listless attention of the mere spectator and walker of the wards, but the fixed, and thoughtful, and earnest attention of the man who feels that he is preparing himself for the performance of weighty, and difficult, and responsible duties.

I would also strongly recommend the student to avail himself of the opportunity of studying disease more closely and methodically, and of gaining the habit of skilfully employing his hands, which is afforded him in the clerkships and dresserships to the in and out-patients of the hospital—employments which are open to competition, and conferred, after due examination, upon the most deserving pupils, without entailing any additional expense. I have some pleasure in speaking of this system of free competition, as I believe it to be a very important advantage secured to the industrious pupils of the college.

In this place a similar caution suggests itself to that which I have already endeavoured to impress upon the mind of the pupil, when speaking of the studies of the college; and that is, to beware how he gives an undue preference to one practical study over another. The error into which he is most apt to fall, and against which he most requires to be cautioned is, that of giving too exclusive attention to the study of surgery. Even if the student intends to practise only that branch of the profession, it admits of grave doubt whether it deserves more attention at his hands, during the period of pupilage, than the practice of medicine; but if he is destined for the general practice of the profession, he need scarcely be told that diseases of a strictly medical nature will form a preponderating majority of the cases which he will be called upon to treat. I need scarcely add, that nothing which I have now said is intended, in the slightest degree, to disparage the profession of the surgeon; I am merely anxious to do justice to the merits, and to insist on the more frequent application, of my own branch of the profession.

I have hitherto spoken of the studies of the college and of the hospital separately; I would now view them in connection, and I would appeal to all who have had any experience of medical education, whether the time which the majority of pupils devote to their studies is sufficient. To this question there is—there can be—but one answer, and that in the negative. There is much more to be done than can be well done in the time. The pupil may possess the greatest facility in acquiring and retaining knowledge, and may display the most persevering industry, but he must still leave much undone. Some of the studies of the college or of the hospital must be neglected, and there is, I fear, little difficulty in saying to which the preference will be given. As the more immediate object with the student is that of passing the examina-

tions which are to qualify him for practice, he gives almost all his attention to the studies of the college, leaving the great work of obtaining experience to the time when he can no longer avail himself of the valuable assistance so liberally provided for him in the wards of the hospital.

In seeking a remedy for this state of things, so injurious to the character of the profession, and so hostile to the best interests of the public, we find ourselves in this dilemma. Either the studies of the college must be abridged (for it is obvious that those of the hospital admit of no curtailment) or the period of college study and hospital attendance must be lengthened.

Though one or two influential names are to be found among those who advocate an abridgment of the number and length of the courses of lectures delivered in the school or college, I have little hesitation in preferring the other alternative as less objectionable.

The members of the medical profession have ever been regarded as men of extensive knowledge and liberal education. In former times, when physicians drew all their knowledge of disease from the works of the medical writers of Greece and Rome, they were reckoned among the most learned men of the age in which they lived. When the several sciences, which are now regarded as essential parts of a medical education, began to be cultivated, a knowledge of these sciences was necessarily added to that of the classical authors; but that knowledge played a very subordinate part and held a low place in their estimation. Now, however, that those sciences have attained a more complete development, and that their value is fully recognised, they have justly taken the first place; whilst the learning of the ancients has fallen into comparative insignificance, so much only being retained as enables the physician to understand the terms derived from those languages, and to refer without difficulty to the few works which have come down to us from those remote times. With this important revolution in the studies of the physician the character which he bears in society has changed, and instead of being valued for his learning, he is now esteemed for the great extent of his scientific attainments and the amount of his general information. Of this reputation no one who has the interest of his profession at heart would wish to see the medical man deprived. The only valid excuse which offers itself for narrowing the sphere of his scientific acquirements seems to be the interference of these studies with more important practical pursuits. Add another year to his residence in London, and there will be no necessity for curtailing any one of his scientific studies; shorten the period of apprenticeship by one year, and the whole difficulty vanishes.

But there is one consideration which is of more weight even than this—viz., that the medical pupil cannot be fairly regarded as in training merely for the practice of his profession. This, it is true, is his first object; but there is another object at which a wise system of medical education must always aim—that of enabling him to use his experience in the service of his profession. That he may be in a position to do this a complete education is necessary, and such an education must have the effect of adding to the number of those (and there are too few of them in all professions) of whom it can be said that by their own labors they have left the world wiser than they found it. All who are engaged in teaching must be furnished with the extensive knowledge of which I speak, and of those who are not, there are few who may not find themselves in a position to make use of information which they could not have derived from the merely practical studies of their profession. This observation applies especially to those who are engaged in the foreign service of their country.

But the best defence of an extended system of education is to be found in its effects. No one who has read the history of medicine with attention can fail to

have perceived that the greatest ornaments of the profession have been men who were skilled in all the learning and science of their time, and of whom it might be well said, as it was of one of the most eminent of their number, that “all Apollo was his own.”

The length to which these observations have extended reminds me that I must hasten to the second part of the subject which I have chosen. But I cannot leave the consideration of the studies which pertain to the period of pupillage without saying a few words appropriate to the re-assembling of our old pupils, and the first attendance of our new ones; for to these the foregoing remarks have been addressed in the earnest hope that they may prove useful to them. To our older pupils, we (for I venture to speak to them in the name of my colleagues) would address a word of encouragement to persevere in the course of steady industry on which they have so happily entered, and to continue to display in their intercourse with each other that gentlemanly bearing, and in their behaviour towards the authorities of the college that courteous and respectful feeling, which makes the task of the teacher so easy, and the condition of pupillage so honorable—to continue, in fact, to distinguish themselves by that correctness of deportment which has gone far towards redeeming the character of the medical student from the stigma which has been so long, and, I fear, not altogether unjustly attached to it. And if, among our older pupils, there are any who in times past have been either unmindful or negligent of the great advantages which the liberality of the council and the zeal of the professors have placed within their reach, we would conjure them, ere it is too late, to reflect that, as a knowledge of medicine is not to be acquired without great and constant application, so the practice of medicine is not to be safely or honestly undertaken without extensive and accurate knowledge.

After the deserved panegyric which I have bestowed on the older pupils of our class, I cannot give any better advice to those who are about to commence their studies than that they should follow the example set them by those of their seniors who are most remarkable for diligence, and for a strict attention to their moral and religious duties. I am happy to be able to say that there will be no difficulty in finding many such models for imitation.

Once more let me impress upon the minds of all our pupils the necessity for regular and sustained application. I know that habits of steady industry are not easily formed at any age, least of all in the season of early youth; and that much strength of purpose and decision of character are necessary to enable a man to keep in the straight path of duty.

Our ancestors were deeply sensible of this, and in their wise anxiety for the welfare of the young, they invoked the aid of discipline, not for their own convenience sake, but for the good of those on whose early education so much depended. Accordingly, in our ancient universities the students were trained to habits of regularity by the daily attendance in the college chapel, by the daily presence in the college hall, and by the early closing of the college gates. The authorities of the universities placed themselves *in loco parentis*, invested themselves with the authority of the parent, and became accountable to him for the well-being of his children. The observances which they enjoined were those which would find place in a well-regulated family, the advice they tendered and the reproofs which they found occasion to administer were such as an anxious parent would have addressed to his child; and they felt that in all they did they were merely enabling the student to put in practice his own better resolutions, and to follow more steadily the dictates of his own reason and conscience.

This wise and wholesome discipline was enforced on all alike, from the scion of the noble and wealthy house down to the poorest and meanest scholar supported at the expense of his college; and all derived

from it the same advantage, for all felt that, by submitting themselves to authority, they were in reality obeying the dictates of their own better natures, and receiving invaluable aid in putting in practice their own best resolves.

This discipline was accepted voluntarily at the hands of the authorities, as the very condition of being admitted to the benefits of education; and by this deliberate act the student bound himself not so much to obey others as to control himself; and to regard all the observances of the college as if they had been self-imposed.

This relation in which the undergraduate stood to the college was the parent of feelings widely different from those which spring from compulsion. The submission was a "proud submission," the obedience a "dignified obedience," the subordination "that subordination of the heart which could keep alive even in servitude itself the spirit of an exalted freedom"—the same feeling which, carried into all the relations of man with man, became the "unbought grace of life," in the relation of the subject to the state "the cheap defence of nations," and in each man's own breast "the nurse of manly sentiment and of heroic enterprise."

Such, and so ennobling, are the effects of that self-discipline implied in the very notion of a voluntary and cheerful submission to authority; such they have been in our ancient seats of learning; and such, in our comparatively short experience, we have found them here; and on no class of the pupils of this college have its effect in raising the character and improving the habits been more conspicuous than in those destined for the profession of medicine.

It is a subject of no ordinary gratification to the professors and to the authorities of this college, that here a system of discipline was first adopted for the medical student, and that within these walls that sentiment which has found an echo in almost every large school in London was first proclaimed—that a collegiate system of education—of intellectual and moral training—with all its wise and wholesome restraints, was the only system which could do justice to the student, satisfy the anxious requirements of the parent, and form a fitting preparation for the duties of so difficult and so responsible a profession.

I now proceed to the second part of the subject which I have chosen,—the difficulties attending the study of medicine as a science, and its practice as an art. I use the term medicine as synonymous, or nearly so, with disease. By the science of medicine I mean an orderly and well-arranged collection of all the accurate and precise knowledge which we possess of disease, and by the study of medicine as a science I understand the active cultivation of that knowledge with a view to increase its amount. I shall, perhaps, be better understood, if I substitute for the phrase *study of medicine as a science*, the explanation which I have now given of the phrase itself. I propose, then, to say a few words on the difficulty of obtaining an accurate and precise knowledge of disease.

It is impossible to understand disease, without a previous knowledge of health. Anatomy and physiology teach this knowledge,—the one treating of healthy structure, the other of healthy function. As the structure of the several parts of the body is an object of sense, there is no difficulty in obtaining a sufficient knowledge of it, provided frequent opportunities of dissection are placed within our reach. It is not so easy, however, to obtain an accurate knowledge of the functions of the several parts of the frame.

This is the province of the physiologist, who aims at acquiring this knowledge by an examination of the ultimate structure of parts beneath the microscope, by observations and experiments on animals, and by observations on the human body both in health and disease. There are considerable difficulties attending each of these modes of inquiry.

The fallacies of the microscope in the hands of the inexperienced or too imaginative observer are so notorious, that I shall content myself with merely reminding you of the different and even opposite views of minute structure and function, which are taken by two different observers, each of whom finds adherents among those who are more or less accustomed to the use of the instrument. Observations and experiments on animals have conferred important benefits on the science of physiology, but it is obvious that the conclusions deduced from them must in many instances admit of imperfect application to the functions of a frame differing in so many respects from that of all other living beings.

Observations on the human body itself are attended with equal if not greater difficulties. Direct experiment is here out of the question, and disease (except in the case of the nervous system, or, to speak more correctly, of the nerves themselves) is but an occasional, indirect, and imperfect instructor. Healthy function, then, must be studied mainly in healthy persons. Now many serious difficulties stand in the way of obtaining accurate knowledge from this source. The extent of the study is one grand difficulty, for to obtain accurate information we must make numerous observations on persons of both sexes, of every age, and of every variety of constitution; and there are few men who possess the patience and perseverance requisite for such inquiries; nor is it easy to find fit opportunities for prosecuting them. The more simple observations, as they require only to be repeated on a sufficient number and variety of persons, are within the reach of industry and perseverance: they demand method and accuracy, but they present no insurmountable difficulties. There are certain functions of the body, however, (I would instance that of respiration) which present serious difficulties, as they can scarcely be examined without the use of instruments, and it is almost impossible to make our observations on a sufficient number of persons to obtain the accurate knowledge of which we are in search. The application of chemistry to the analysis of the various secretions of the body is attended with similar difficulties.

There is still one other source of fallacy, and consequently of difficulty, in this observation of healthy functions, and that is, that persons laboring under those slight derangements of health which escape superficial observation are apt to be classed among the healthy. This source of fallacy can scarcely be effectually guarded against.

Furnished with this imperfect knowledge of health—imperfect for the reasons now assigned—the physician enters upon the study of disease. The functions of which he knows so little are now disordered, not separately, but in groups, and new phenomena, which are not healthy functions simply increased or diminished in intensity, but changed in character, arise, and are variously blended so as to present a most difficult and intricate subject of study. His first care is to give a name to this assemblage of phenomena, in order that he may be able to refer to the descriptions of authors, and profit by their recorded experience. Here we encounter another difficulty, in degree, if not in kind, peculiar to the study of medicine—a difficulty in writing accurate histories of disease.

The difficulty of description is always proportioned to the number of objects which the description embraces; and in this respect disease may vie with any subject of study, however intricate. A correct history of disease must include the past, the present, and the future. The previous habits of life of the patient, the diseases under which he has labored, and the various influences to which he has been exposed, make up the past; his existing symptoms, of which some are gleaned from the imperfect description of the patient, others from the observation of the physician, with all the minute distinctions which constitute the diagnosis, form the history of the present; and the detail of daily progress, blending, as it does, the natural changes of

the disease itself with the effects of remedies, and in fatal cases the final examination of the body, make up what may be termed the future.

I need scarcely dilate on the difficulty of attaining to anything like accuracy in the description of a compound fact consisting of so many particulars, so curiously and intricately involved, and to be unravelled only by the most careful use of the senses, and the most subtle exercise of analysis.

If it be difficult to write accurate histories of disease, it is still more difficult to make use of them when written. The very minuteness of detail which makes the history complete renders the work of analysis so laborious that few men have the courage to apply themselves to it; so that the materials which have been accumulated with such infinite pains are laid by as unmanageable, the subject matter of journals which lie idle on our shelves, or of bulky volumes of manuscript which repose neglected in the cupboards of our hospitals.

The habit of case-taking has doubtless trained many a young pupil to a careful observation of disease, but the cases themselves have done little towards establishing those general principles for the formation of which they were the acknowledged materials. This is but another proof of the difficulty of a profession whose facts are so cumbrous that it requires no ordinary degree of courage to make use of them.

It is from these histories of disease that a description of diseases must be written; that is to say, such a description as shall embrace all the leading features of each disease, with the more remarkable deviations from its usual course. I need not enlarge, after what I have just said, on the necessary imperfection of such descriptions, and the great difficulty of composing them.

These descriptions, collected and arranged, make up our treatises on the practice of medicine, and the arrangement of diseases according to their natural affinities, our nosology. This classification of diseases partakes of the difficulty attaching to the history and description of them, as is proved by the many abortive attempts made in rapid succession, by men possessed of extensive experience and signal acuteness, and most certainly equal to any ordinary work of arrangement. The fact, that after so many unsuccessful attempts at a reasonable and useful classification of diseases, we are by common consent throwing aside all nosological systems, and adopting an artificial arrangement which involves no theory, and presupposes no general and pervading principle, is an evidence not only of the obstacles which lie in the way of all attempts at arrangement, but of the difficulty inherent in the study of disease.

Before I quit the consideration of the difficulties attending the observation of disease, I must stop to pay a passing tribute to those to whom we owe our present precise knowledge of the principles of diagnosis. The labors which have rendered the name of Laennec immortal, followed up with such marked success by his own countrymen, and many worthy rivals on this side the water, have conferred on that part of the science of medicine which has to do with the identification of diseases benefits of the most substantial kind, and have proved that, difficult and uncertain as the science of medicine is, there are still some parts of it which admit of a degree of precision not to be surpassed by the most favored sciences. The more certain discrimination of diseases which has resulted from the possession of these physical signs, has also had a most important reaction on the practice of the healing art; and as skill in the use of the instruments of diagnosis is obviously not to be acquired without the most frequent practice and the most extensive experience, the public is furnished with an obvious and tangible reason for preferring the well-educated medical man to the ignorant pretender.

Having glanced thus briefly at what relates to the observation of disease, I proceed to say a few words

on the difficulties which the physician encounters in obtaining accurate information with regard to the operation of remedies. The first source of difficulty can scarcely escape the attention of any one who reflects for a moment on the subject—I mean our necessary ignorance of the power of the *vis medicatrix nature*. The human body is so constituted, that it possesses within itself the means of repairing the effects of violence, of resisting to a certain extent the influence of deleterious external agents, and of regaining its health when affected by disease. The healing of extensive wounds, the provision made for directing towards the surface of the body the fluids effused in consequence of internal inflammation, the prompt recovery from severe diseases by means of critical discharges,—these and other familiar examples which might be cited, show how much the body is capable of effecting for itself by its own unassisted efforts. Now the real amount of this healing power, and the degree in which it might be safe to trust to it, has never yet been, nor can it ever be, ascertained. The medical man does not dare to withhold from the sick such remedies as his own experience has appeared to sanction, or which have the general reputation of being useful, lest he should be thought to sacrifice to scientific curiosity the well-being, or even the lives of his patients.

Notwithstanding, however, the impossibility of making direct observations on the amount of the *vis medicatrix nature*, accident, or the neglect of patients or their friends in seeking medical advice, or the administration by the ignorant of harmless remedies, and, above all, the *médicine expectante* of the ancient authors, and of the modern French school, have taught us something of the vast influence which this power exerts in the cure of disease. At any rate, we know enough both to distrust our own judgment, and to explain the success of each of the unnumbered remedies which credulity receives at the hands of ignorance and imposture.

Our necessary ignorance, then, of the extent to which the body is capable of repairing the injuries which it receives, and of curing its own diseases, is the first and great obstacle opposed to the attainment of accurate information with regard to the effect of remedies. Another obstacle, in some degree allied to the foregoing, is the difficulty of making comparative experiments. Let us suppose that two remedies are, by high authority, recommended for the cure of the same disease, the medical man has almost as much difficulty in bringing his mind to that state of indifference with regard to both of them, as would justify his alternate employment of either, as he would have in leaving the patient to the unassisted efforts of nature; and, even supposing that he has made up his mind to the trial, it is extremely improbable that his own experience will supply him with a sufficient number of cases admitting of strict comparison with each other, in all respects, to enable him to solve the question.

It might be possible to arrive at this desirable knowledge by contrasting the experience of two practitioners, but in order to do this their cases must admit of strict comparison, must be reported with scrupulous accuracy, and submitted to careful scrutiny. It requires, moreover, a rare absence of all selfishness, and a disregard of reputation, little to be expected of any class of men, to submit to a comparison which must result in showing that the treatment which one of the two has adopted has been comparatively unsuccessful. Then there is the utter impossibility, in the case of the greater number of remedies, of being sure that what we prescribe is really administered, or that, if given, it was possessed of the virtues usually attributed to it. The collection and preparation of remedies, and the adulteration which so many of the more expensive and valuable medicines undergo, place fresh difficulties in the way of an accurate knowledge of the effects of treatment.

These brief and necessarily imperfect observations will serve to show the nature and amount of the difficulties attending the study of medicine as a science, or, in

other words, of the obstacles opposed to the attainment of an accurate knowledge of disease.

It is not sufficient for my purpose, however, to prove that medicine, in this respect, is a most difficult profession; I am concerned to show that it is the *most* difficult profession. This assertion is borne out by a few simple and obvious considerations.

regard the human body as a mere mass of lifeless matter. It belongs to that form of matter which is least understood and most difficult of study—the organised; and to that class of organised beings which is the most complicated—the animal; and it stands at the head of that long ascending series which reaches from the scarce discernible separation between the lowest form of vegetable and animal life up to the highest perfection of animal organisation.

Place this frame in the hands of the anatomist, and he will tell you that all the powerful and subtle machinery by which man has gained his still unfinished mastery over nature is as nothing compared to this; he shall write you a volume on the hand, and own, when it is done, his subject unexhausted; he will point to the circulating system, and tell you that he knows not which most to admire, the admirable simplicity of its pipes and conduits, the surprising ingenuity of its centre, or the intricate arrangement of its remote extremities; he shall trace the nervous system from its centres, so strongly and skillfully defended from external injury, to the minute and intricate network which it weaves about every texture of the frame; and he shall own that, though he discovers in the one a centre and source of power, and in the other a provision for its universal distribution through the frame, he can form no conjecture as to the nature of that power, nor recognise in that mysterious arrangement of matter any analogy, however remote, with the ingenious contrivances by which man extracts from matter the means of its own subjection to his will, and transmits the mandates of that will almost with the velocity of thought itself. Let him give to observation a wider scope, and take in the whole range of the animal creation, and he will tell you that at every point of the long series which reaches from the polype up to man, he has found with increasing perfection increasing complication, until, in the human frame itself, he reaches the crowning point of both.

This, and much more, he learns by the use of his unassisted senses; the microscope opens a new world of wonders to his sight; every drop of fluid, and every particle of matter, reveals a complex composition or a most intricate arrangement: for each secretion a peculiar structure, for each structure a peculiar distribution of vessels, and a distinct arrangement of nerves.

The history which anatomy has begun, chemistry finishes. With what confidence does the chemist approach the examination of the human frame! His knowledge of unorganised matter how profound and extensive! his power coextensive with his knowledge! at his bidding the very elements burst the strong bond which binds them together, or hasten to resume their original form; invisible agents attend to do his bidding; he makes the subtle element of heat his minister, and the flashing lightning his willing messenger; but when he approaches the human frame, furnished with this knowledge, and armed with this power, his knowledge owns a limit, and his power receives a check. He will tell you that the greater part of the fluids and solids of the body may be resolved into four simple elements, and that these, combined in various proportions, and blended in the several parts with substances derived from the inorganic world, compose the entire fabric of the body. But he is profoundly ignorant of the means by which these elements are combined and held together, nor do all the manifold resources of his art enable him to compound one drop of its fluids or build up one atom of its texture. In dealing with inorganic matter, he finds that that which he

has analysed he can in many cases recompose; but with the exception of a few simple products of secretion, he can imitate no single process of all the subtle chemistry of life.

Let us suppose the frame, thus wonderfully and fearfully made, to be endowed with life, and all this marvellous machinery set in motion: the heart beating; the chest heaving with the alternate movements of respiration; the blood circulating in an uninterrupted stream through unnumbered vessels; the glands pouring out their various secretions, some destined for separation from the body, as being useless or noxious, others applied to further purposes in the economy; the old and worn out particles of matter continually replaced by new ones; and the nervous system everywhere present, presiding over every function with so wonderful a precision, that to give it the character of an intelligent and voluntary agent is scarcely a stretch of imagination. What a wonderful history, too, is that which, beginning with conception, traces the frame to the full maturity of the embryo, and from birth through the several periods of childhood, youth, manhood, and decrepitude, till it once more mingles with the dust from which it was made, and with the earth from which it drew all its materials of support!

But the human body, thus intricate in structure and function, is the tenement, and the nervous centres are the material instrument, of a mind which perceives, and thinks, and feels, and wills; which strongly affects the body by all its more violent emotions, and is, in its turn, disturbed by every severe disorder of the frame.

This complicated union of mind and body, this sentient, thinking, intelligent being, is exposed to a thousand varying influences from within and from without; and though it is so constructed as to bear extremes of heat and cold, and to derive supplies of nourishment from almost all things which have been previously endowed with life, yet heat and cold, abundance and scarcity, pure and impure air, labor and indolence, temperance and excess, activity and inactivity of mind, joy and grief, prosperous and adverse circumstances — indeed, every influence, whether favorable or unfavorable, to which man is subjected, produces some effect upon his frame; and these several influences combining in various ways and proportions, lead to that infinite variety in the external appearance of mankind, which experience proves to coexist with internal differences not less remarkable.

It is not difficult to understand how a frame, which presents such infinite varieties in health, should, when affected with disease, become a study of surpassing difficulty; and I think that no further arguments can be necessary to establish the position that medicine, considered as a science, is, beyond all comparison, the most difficult and the most complicated in existence.

If medicine had not been so difficult a science, it is scarcely possible that it could have been cultivated by so many men for so many ages, without attaining a higher degree of perfection. Among so many thousands constantly engaged in the study and practice of their profession, there must have been some master minds, capable of grappling with ordinary difficulties and of overcoming them. Surely a science which numbers amongst its zealous cultivators an Hippocrates, a Boerhaave, a Sydenham, a Harvey, a Haller, a Hunter, a Bell; which boasts of such men as Jenner and Laennec; with a long roll of names deserving of record as men of consummate learning, extensive scientific attainments, unwearied industry, and practised acuteness, must continue imperfect, not from the fault of its members, but from its own inherent difficulty.

The real nature of the difficulties which attach to the study of medicine as a science will at once appear if we compare it with other sciences which have attained a great degree of accuracy. The physician, unlike the mathematician, is not the creator of his own science; unlike the astronomer, he has no simple

relations of matter to deal with; nor can he, like the chemist, make any two things which he examines counterparts of each other. The instruments which he uses are few as compared to the objects which he is called upon to examine; there is little place for experiment, comparatively few opportunities for accurate observation, and great obstacles to the use of numbers; and, above all, he possesses no numerical theory.

Having said thus much on the difficulties attending the study of medicine as a science, I may be expected to say something of the means by which these difficulties may be removed.

We all know that there is no royal road to knowledge, and that industry is the necessary condition of all scientific attainment. In no science is that quality more required than in the science of medicine, which is in all its parts one of observation. *Ars medica tota in observationibus*. Industrious observation, then, is the first requisite; but it must be observation, in the true, and not in the vulgar, sense of that word—not in the sense of a mere passive exercise of the senses, but as the union of thought and perception; of thought electing an object, maturing a plan, guarding against every source of error, inventing instruments, improving methods, arranging and classifying the facts collected, and lastly, submitting them to a searching analysis. The simple employment of the senses is not observation, nor is the frequent exercise of them experience; it is in the true sense of these terms that the one is the parent of the science, and the other of the art, of medicine.

We must employ a language, too, free from all ambiguity—the language of numbers—not as if it were a language peculiarly adapted to this or that science, and to no other, but as being the universal language of all knowledge which deserves the name of science; we must cease to argue about the numerical method (or, as it is incorrectly styled, medical statistics), as if there could be any doubt of its use in medicine, as in every other department of knowledge: above all, we must make the more perfect sciences models to our own; we must examine into the real cause of their superiority, and submit ourselves to the teaching of their example. We must cease to separate ourselves, as we have done too long, from the fellowship of other sciences, but must strive to renew and strengthen the tie which should bind all the sciences together, so that medicine may again become, as it is here, a part of philosophy.

It is not the least advantage of this college, as a place of scientific and practical teaching, that under one roof, and under the sacred sanction of one common principle, it has brought together every department of learning and science; and that whilst it can boast of having successfully prepared many a youthful mind for the spirit-stirring competition of our ancient universities, it can offer to them in return facilities for practical teaching, which can exist only amidst the busy haunts of men, and nowhere in such perfection as in the metropolis of a mighty empire.

We, the professors of the medical department of this college, feel it to be no common privilege to be associated in the great work of practical teaching with men who, by the skilful employment of the very methods which we know to be essential to the advancement of our science—the invention of accurate instruments, the institution of ingenious experiments, the patient exercise of observation, and the skilful use of numbers—have done so much to enlarge the boundaries of science, and to extend and confirm man's dominion over nature. Nor are we indifferent to the still greater privilege of being perpetually reminded, by the assertion of the great principle on which this college is founded, that man's mastery over nature is of infinitely inferior importance to his victory over himself, that without this all his learning may tend to no better purpose than to "blow up self-conceit and nourish pride," and his philosophy, with

all its enlightenment, still leave "a veil of midnight on his heart."

But it is not enough that we should, by seeking a closer union with other sciences, strive to profit by their example, and to obtain increased facility in using their methods; but we must ourselves aim at the formation of a more just estimate of the value of scientific researches, we must strive to reform the crude notions of the practical which would place it in a minute observation and tedious description of single cases, instead of in general truths, and general principles, and accurate standards of comparison. We must discourage that impatience which longs to turn to purposes of immediate utility the scientific researches, which, though stimulated by a love of truth and a laudable curiosity, were undertaken in the certain confidence that all truth is in its nature practical, and that if it have no immediate application to purposes of obvious utility, it tends to render other truths more fruitful, by removing out of their way the fallacies which would impede their growth. All improvements in the general and professional education of the medical man tend not only to the formation of this juster estimate of the value of scientific research, but to increase the number of those who, by rendering the science of medicine more certain, make the practice of the healing art more easy.

The length to which this lecture has already extended, and the space which I have devoted to an examination of the difficulties attending the study of medicine as a science, warn me to be very brief in my observations on the difficulties which beset the practice of medicine as an art. I the less regret this necessity, inasmuch as it is now universally admitted that medicine is a scientific and not an empiric art. It follows, therefore, that if the science be imperfect, the art must be difficult; and the nature of that difficulty will be readily seen if we retrace the process by which our scientific knowledge was obtained.

By observations made under circumstances of peculiar difficulty, on beings of whom each was different from his fellow, and on functions, and symptoms, and diseases varying within wide limits of intensity, with infinite labor and pains the unstable fabric of our knowledge has been built up. In applying this knowledge to individual cases we must, of necessity, encounter, over again, all the varieties from which our original results were obtained; and state these results as accurately as we will, using figures as our language, we shall have general rules and standards of comparison admitting only of the most general application to individual cases; so that much must ever be left to that individual experience and practical tact, which dies with its possessor, and which finds a place in the arts in exact proportion to the imperfection of the sciences on which they are founded.

If time had permitted, I should have alluded to the necessity imposed on the medical man of acting in most cases on the spot, without any possibility of referring to authorities to assist him in forming an opinion, or choosing a line of practice; and I should perhaps have expressed the natural regret which all medical men must feel, that the public should add to the necessary difficulties which lie in the way of the medical man, but especially of those who are young in the profession, by giving to the bold and reckless and ignorant empiric that confidence which they deny to the man of education and real experience. But I quit this tempting theme, and with it the subject of the difficulties attending the study and practice of medicine, in the hope that the few and imperfect observations which I have been led to make, may encourage every member of the profession to that industry by which alone the difficulties of so vast a science can be overcome.

A lecture devoted to a discussion of the difficulties attending the study and practice of medicine, though it may nerve the energetic and enterprising to the efforts by which such difficulties are overcome, may

perhaps leave in the minds of the less confident a feeling of doubt and anxiety, and throw a gloom over the commencement of their students. I have endeavoured to guard against this result by showing that, though the richest endowments of nature, and the best gifts of education and study are honored by being employed in the service of our science, yet average talent, backed by patient industry, will suffice to furnish the medical man with the knowledge and confidence necessary for the practice of his profession. But should any misgivings still linger in the mind of the student, I would lead him away from the contemplation of the difficulties to the more cheering view of the excellent nature of the profession on the studies of which he is about to enter. Is he fond of learning, he will find ample scope for the exercise of his memory; is he attached to scientific pursuits, there is scarcely a branch of science which does not figure in the programme of his early studies; is he doubtful of the real nature of his talents, and of the studies best adapted to his character, he will meet with so great a variety in his preparatory studies, and in the after practice of his profession, that he will find no difficulty in making an appropriate choice; or has he the high ambition of being useful to mankind, by adding to the existing stores of knowledge, he will nowhere find so wide and interesting a field for his exertions. Such is the provision made for the employment of the intellect. There is at least equal scope for the exercise of the social feelings. Does he wish to do good, what a wide field for the exercise of benevolence! Does he prize the gratitude, the good-will, and the friendship of his patients above the gold which pays him for his services, what an ample return of kindly feelings does he receive! Again, as regards his own self-improvement, how well adapted are all his studies and pursuits to that great purpose! The most perfect and wonderful of the works of nature, from which the natural theologian derives his most convincing proofs of the wisdom, power, and goodness of the Deity, forms his first and principal study. He examines its mechanical contrivances in death, he watches the play of its functions in life, he sees in how many instances it preserves and repairs itself, how admirably it is adapted to the external objects by which it is surrounded. But this is not all: he gleans from the daily exercise of his profession instruction denied to all others. He sees the punishment which follows sin, and falls on every form of intemperance; he sees virtuous habits rewarded, even in this life, by the blessing of health, and a considerable immunity from bodily suffering; he witnesses the agonies of conscience in the wicked, the calm yet humble self-approval of the good; life and death unite in teaching him lessons of religion, and his are the solemn and awful legacies of the grave. And yet, with all these moral and religious advantages, the members of the medical profession are thought to be peculiarly prone to infidelity.

It is difficult to say how or where this popular opinion took its rise; and it is certainly impossible to produce proof either for or against it. This at least we know, that mere intellectual culture, though carried to its highest point, offers no security against disbelief, and that in every department of science and literature striking examples of infidelity are to be found. The anatomist, as he explores the wonders of the human frame; the astronomer, as he traces the harmonious movements of the heavenly bodies; the historian, as he follows the course of time, and marks the rise and fall of nations—each in turn may be blind to the hand which formed and guides all material things, and to the will that determines the destinies of mankind: and, just as the astronomer can out-balance the name of Laplace with that of Newton, and the historian is at no loss to find great names among the believers in religion to place against those of a Hume or a Gibbon, so may the physician find, for every instance of disbelief, more than one bright example of humble and rational faith.

Leaving this question, as it must be left, undecided, I would merely state, that the general belief to which I have alluded is decidedly opposed to the spirit in which the best, the most learned, and the wisest men, whose names adorn our literature, have spoken of the members of our profession. One author, Pope, speaks of them as "the most amiable companions and the best friends, as well as the most learned men;" Dr. Johnson celebrates their "great liberality and dignity of sentiment, their prompt effusions of benevolence, their willingness to exert a lucrative art when there is no hope of lucre." Dr. Parr speaks of them as "the most enlightened professional persons in the whole circle of human arts and sciences;" and Cowper mentions by name the "virtuous and faithful Heberden," and

"A Cotton, whose humanity sheds rays,
Which make superior skill his second praise."

The character of the physician, thus rendered immortal in the undying literature of his country, is that which he bears at the present day. Foremost in every work of benevolence, forgetful of self, the undaunted and unwearyed attendant at the bed of sickness, present at every scene of suffering, and absent from no labor of love, supporting our public charities by his purse and by his influence, and giving his time and the benefit of his experience to the poor with a distant and uncertain prospect of reward, he crowns all his claims to public gratitude by laboring with singular disinterestedness for the preservation of that health, the loss of which is the means of his own support and the very source of his professional income.

It is this latter attribute of the medical character on which every one who honors and loves his profession will dwell with most complacency, and it is this which emboldens me to close my lecture with a brief allusion to the most interesting and important topic of the day—the public health.

There is a right, Gentlemen, second only to that which no Englishman can think or speak of without a glow of exultation—a right which England has proclaimed as the law of her wide empire, purchased with her wealth, promoted at the cost of the lives of her bravest citizens, advocated by her diplomacy, and enforced wherever her own strong arm could reach—the right of every man, whatever may be his country or his color, to the enjoyment of personal freedom—I say there is a right second only to this, far above all political and conventional rights, but rarely recognised and never yet openly asserted—the right of every man to breathe the pure air, and to enjoy the fair light of heaven; to live as long, and enjoy, whilst he lives, as much health as is consistent with the frailty of his frame, and the curse, so rarely in the case of the poor man changed into a blessing, that by the sweat of his brow he should earn his bread. If health be a blessing, if without it all other blessings, even freedom itself, are valueless, surely it must be a right too, and it must be the first duty of a government to take care that its poorer subjects are not robbed of this blessed right by avarice, or negligence, or even by their own depraved choice.

It has now been proved almost to a demonstration, that the pestilential diseases which are raging through the length and breadth of the land, in the rural village no less than in the crowded city, which destroy annually more lives than this country has lost in her bloodiest wars, which make the fourth part of the labourer's life the prey of sickness, and shorten it by about the same fraction of its probable duration:—it has been proved that these pestilential diseases may be banished by the simplest means, and at an expense much less than the cost which they entail upon the public—the cost of fever and small-pox hospitals, and workhouse infirmaries, and pauper burials, and widows, and orphans, and cripples, the helpless victims of private avarice and public negligence. Such are the brighter tints of a picture of which no words can paint the shadows. The soul sickens, and the mind recoils with horror at

the moral degradation which springs, like a twin monster, from the fruitful source of all this physical suffering. Can such things be permitted in a country which has made such sacrifices for liberty? Surely it is slavery of the most abject kind to be shut up from the light of heaven, surrounded by filth and corruption, and to be placed in circumstances where sin is as hard to be avoided as disease itself.

These things cannot last; but if we remain deaf to the loud cry of suffering poverty, then shall poverty itself, by the very law of its nature, become its own avenger; for the offspring of those condemned to all this complicated misery shall become a spreading plague; the old and the middle-aged, those who have lived long enough to love peace, and to know the value of delusive promises, shall cease from among our laboring population, and those who give stability to society and strength to governments, shall be replaced by the young, the inexperienced, the turbulent, and the disaffected. These things, too, are matters, if not of demonstration, at least of the strongest inference. Let us hope, then, that the time is not far distant when these evils will be redressed; when the wide and open street, the well-drained city, the spacious and airy cottage, and, above all, a healthy and robust population, shall be the chosen trophies of our civilisation, and the proudest monuments of our humanity. Let England, proud of her warlike deeds, no less than of her peaceful triumphs, the liberator of Europe from the tyranny of a conqueror, and of the whole world from the intellectual bondage of ages, who boasts the first and foremost men in every science, and the most skilful in every art, when she rehearses her immortal names, remember that not the least among them is that of Jenner; and let the success which has attended the imperfect application of his immortal discovery encourage her to enter upon that great work of mercy which shall end in chasing pestilence from our shores. In this labor of love, in this great work of physical and moral regeneration, she will have the earnest and cordial support of that profession which is ever active where good is to be done, and makes it her proudest boast that all her works are works of mercy.

DIAGNOSIS OF INDIAN AND ENGLISH CHOLERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—It was with much surprise I learned from the "Provincial Medical Journal" of 27th August, that that most dire of human pestilences—Asiatic cholera—had made its appearance in Poole; and, to add to the alarm that such an announcement was calculated to occasion, a second case of that terrific disorder is reported in the Journal of the following week.

In common with most other places and neighbourhoods, instances of disease, the offspring of functional disturbance of the liver, and chylopoietic organs generally, have been of late frequent here. In my practice, diarrhoea of a more than ordinary severity constituted the majority of these cases; and I have had several patients whose complaints exhibited striking examples of that well-known disease, English cholera. An epidemic of this kind might reasonably have been expected, as the result of the long-continued high temperature, for which the late summer has been so remarkable; and to this its acknowledged efficient cause it is, no doubt, to be ascribed. I have no desire to impugn the correctness of your very respectable correspondent's observation; but as the diagnosis of these diseases is of immense importance to the

public, I take the liberty, by a few brief remarks, to direct the attention of your numerous readers to those distinctive differences which severally characterise the English cholera and the pestilential cholera of the East.

To whatever cause or causes cholera may owe its origin, the English variety is almost invariably found to occur towards the end of summer or the beginning of autumn, and in severity is commensurate with the previous heat of the weather, whilst the Asiatic cholera prevails at all seasons of the year, and in its late visit to this country proved remarkably fatal in the winter. In Gateshead alone, from the 25th of December to the 3rd of February, there were 142 deaths.

Purging, vomiting, tormina, and spasms of the limbs, are symptoms common to the two disorders; but a distinction has been drawn from the qualities of the matters discharged from the stomach and bowels.

Cullen describes the English disease as marked by a purging and vomiting of a bilious fluid, whilst the Asiatic cholera is said to be equally distinguished by evacuations resembling rice-water. It is, I think, clear in this, as in many other instances of similar nature, that a too rigid adherence to nosological arrangement may lead us into error; for, as Dr. James Johnson very sensibly observes, "When the bile has been washed out from the alimentary tube, the discharges will necessarily be colorless." Even Cullen says, the matter evacuated is not always bilious; therefore this sign must be allowed to be somewhat equivocal.

With respect to the spasms of the muscles of the extremities, those of the hands and feet are more affected in the Asiatic cholera than in that which is common to this country. I remember distinctly the case of an old man who died of the Asiatic cholera in the epidemic of 1831-2, whose tendon of the extensor longus pollicis pedis was by the spasm of its muscle kept tight, like the string of a bow, for a long period before his death. The blue color of the skin, which was so striking a feature of the pestilence which occurred during that period, not being mentioned by authors as a symptom of English cholera, might be looked upon as a sign of considerable importance; but those who have had much clinical experience will find little difficulty in calling to their mind a variety of cases, even apart from those of pulmonary congestion, where the vital powers have suffered great depression, in which a remarkable blueness of the surface has been noticed. In the cold fit of ague this condition of the skin is by no means uncommon. I have myself been particularly struck with it in some cases of fatal puerperal peritonitis; any causes, indeed, producing great general debility of the capillary vessels, with a feeble action of the central organ of the circulation, might give rise to these appearances by unduly retaining the carbonaceous matter in the blood. Therefore I should say that blueness of the skin, even arising concurrently with colorless dejections, is not necessarily pathognomonic of Asiatic cholera. But there are some local peculiarities of color on which more dependance may be placed; I refer here to the blueness about the mouth and the deep blue areola around the eyes. But the symptoms belonging to the early stage of Indian cholera most to be relied upon are—a remarkable shrinking or shrivelling up of the person,

and especially of the hands, fingers, and tongue, with cold breath, and a squeaking, indistinct voice, scarcely to be heard or, as Dr. Barry has described it, "the low whine like that of a dog dying from arsenic."

Those who had the opportunity of observing the true Eastern disease, as it appeared in Europe in 1831-2, can scarcely confound it with the English cholera morbus; it is the *tout ensemble* of the disease which is so striking. About twenty cases of genuine Oriental cholera occurred in Poole and its neighbourhood at that time, most of which I saw. In the first case that came under my observation I felt that I was in the presence of a new disease, and that what I then witnessed I had never before seen; and I have no hesitation in saying that since the disappearance of that epidemic nothing resembling it has crossed my path. But the circumstances most pathognomonic of Asiatic cholera, according to the best authorities, are, the secondary fever and the symptoms arising out of it, as the dull, dejected eye, congested conjunctiva, hot and dry skin, quick pulse, &c. In fact, I am inclined to concur in opinion with those who consider pestilential cholera as a true pyrexia, and that the assemblage of symptoms from which it receives its name belong only to the first stage of the disease.*

The English cholera, though occasionally a fatal complaint, is rarely attended with much danger.

In the course of thirty years I have had many opportunities of witnessing it, and I have observed no differences in the late epidemic to that of bygone seasons. I found pretty full doses of opium, with external warmth and sinapisms to the abdomen, relieve the most pressing symptoms in the onset of the attack. These remedies, followed by a few doses of calomel and rhubarb, have in my practice seldom failed in restoring the patient to health.

I am, Gentlemen,

Your obedient servant,

THOMAS SALTER.

Poole, Sept. 27, 1842.

CASE OF HYSTERIA. (?)

By EVAN EVANS, M.R.C.S., Leeds.

E. M., aged nineteen, of plethoric habit, and usually suffering at her menstrual periods, from severe pains in the head, lumbar, and hypogastric regions; being at service, on the morning of January 25, 1840, descended into a flooded cellar as high as her waist, and kept her wet clothes on for several hours, having, at the time, her catamenia in the second day; rigors and clammy perspirations compelled her after a time to desist from work, and she drank, in about an hour and a half, upwards of a pint of strong hot brandy and water, which enabled her to resume for awhile; in the evening, shivering and exhaustion prompted her removal home, when another large supply of spirit and water was administered; at nine, p.m., her friends were so alarmed as to send for me. At my visit, I found the patient prostrate and insensible, and concluded, on hearing the history, from excessive stimulation. A mustard emetic speedily evacuated the stomach of indigested food and a large quantity of fluid, of strong spirituous

odor; consciousness was gradually regained, but there remained great bodily depression, with shivering and chattering of the teeth; pulse feeble, slow, and regular. To have a hot hip-bath as soon as practicable.

Eleven, p.m. No shivering; skin warm and moist; great pain in the head. An evaporating lotion to be constantly applied, and to take the following powder immediately:—

Powder of jalap and aloes, of each, fifteen grains;

Calomel, four grains.

26, Nine, a.m. Pain in head relieved; skin moist and cool; pulse soft and regular, not quick; bowels freely relieved; urine rather scanty. To drink freely of warm fluids, and be kept quiet.

Three, p.m. Pain in head almost gone; complaints of uneasy sensations in back and down the thighs; is restless and fretful, and *fearful* of choking; pulse very slow, and much fuller than in the morning; urine more copious, and very pale. To take compound tincture of valerian and tincture of assafœtida, each, twenty drops in an ounce of camphor julep every three hours.

Nine, p.m. No complaints; bowels copiously moved; midnight summoned suddenly, patient in delirium, being with difficulty restrained; eyes red and staring; skin hot and dry; urine scanty and high colored; pulse 110, sharp, and incompressible. A stream of cold water on the vertex gave a quiet interval, in which I abstracted about a pint of blood from the arm, after which she became quite calm and collected. Repeat the purgative, and take ten drops of digitalis every second hour in camphor julep. Continue lotion.

27, Nine, a.m. Pulse 90, regular; skin moist; head cool; bowels open; urine more copious and not so deep in color. To continue mixture at intervals of four hours. Five, p.m., symptoms favorable; repeat purgative.

28, Nine, a.m. Bowels copiously relieved, other symptoms good; repeat digitalis. In the evening, being engaged, my partner made the visit, and ordered an ounce of compound decoction of aloes every three hours, and five grains of compound aloetic pill at bed-time.

29. Seen twice; improving. (To continue decoction of aloes.

30, Two, a.m. Summoned hurriedly—"She's dying." Found my patient in a semi-recumbent posture in her bed; countenance pale; eyes firmly set; pupils dilated; jaw fixed; skin blanched, cold, and clammy; the right arm half raised, and the index finger pointed upwards; breathing suppressed; a lighted candle had no effect on the eye, neither had sound on the ear, nor odors on the nose (burnt feathers, snuff, burnt candle-wicks, assafœtida, and ammonia, were all tried); the mouth being forced open, continued so, but the arms and legs regained their former position in a short while. I administered compound spirit of æther, compound spirit of ammonia, and compound spirit of valerian, alternately, in drachm doses, at varied intervals, and in about two hours heavy sighing commenced; the hand (raised one) was waved to and fro, and the countenance assumed a benignant smile. In about an hour more she recognised persons round the bed, but shortly fell off into a deep sleep, which lasted several hours. On awakening, she

* The eruptions so frequently accompanying true typhus fever have been observed among the symptoms of the second stage of Asiatic cholera.

complained of excessive exhaustion, and was much distressed at the roughness of her mouth (caused by the undiluted spirits).

This feature of E. M.'s case seems to partake of the characteristics of trance, as she persists, in opposition to all persuasion, that she was *in heaven*. I need not occupy further space with particulars, as subsequent symptoms were merely those of amenorrhœa, which gradually yielded to the use of dec. aloes co., and mixt. ferri co., in equal parts, one ounce three times a-day, and the occasional employment of the warm bath, and compound aloetic pill. In fourteen days the catamenia reappeared, continuing the ordinary period, and have since been subject to no irregularity. Three months subsequently this patient had a slight attack of pure hysteria, from which, however, she in a few days recovered, and has up to the present time continued well.

September 26, 1842.

ABSCESS OF THE LUNG.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Perhaps the following case of pneumonia, terminating in abscess of the lung, may not be uninteresting to your readers, being a disease of such very rare occurrence. Laennec, with all his opportunities, and in all his dissections of pneumonic patients, met with only one case in twenty years. Dr. Budd, of King's College, while physician to the Dreadnought, met with three cases in three years. By its insertion in the pages of your valuable Journal, you will oblige

Your obedient servant,
M. R. C. S.

CASE.—J. B., aged thirty-four, ostler, had always enjoyed good health until the 27th of August, 1842, when he caught a severe cold, and was seized, on the evening of the same day, with shivering, followed by great fever and thirst. On the following day the fever was accompanied by a severe cough, shortness of breath, expectoration, and pain under the right mamma. The poor fellow being in very humble circumstances, did not procure medical assistance until the 31st, four days after the onset of the disease, when he requested me to see him. I found him lying on his left side, complaining of violent pain under right breast, short dry cough, expectorations of the rusty nature so characteristic of the second stage of pneumonia. Countenance anxious; respirations 42; pulse 136, full, and strong; urine scanty; skin dry; tongue furred. The left side was perfectly resonant on percussion, both before and behind, and the respiratory murmur was distinctly audible. Right side emitted a dull, flat sound on percussion for a considerable extent underneath the scapula; motion of ribs over the affected part diminished; no sound of any kind to be heard by auscultation, the lung being completely consolidated, and no air entering it. I bled him to eighteen ounces, and ordered the follow-

Tartarised antimony, half a grain;
Water, one ounce. To be taken every two or three hours.

September 1. Much relieved. Respiration 36; skin moist; had some sleep in the night; pulse 100; nausea; slightly purged. Ordered ten drops of tincture of opium to each dose of mixture.

2. Purging has ceased; pain in side diminished; pulse 100; urine scanty; tongue dry; respirations 36; cough less violent; expectoration rusty. Continue remedies.

3. Not so well this morning. Respirations 40; pulse 110; countenance anxious; purged; great dullness on percussion; no sound to be heard by auscultation. Ordered a large blister under right scapula. To have an ounce of chalk mixture after every fluid stool.

4. Purging has ceased. Respirations 42; pulse 110; tongue dark, and furred; countenance very anxious; breath fœtid. Ordered brandy and ammonia every four hours. Other remedies to be omitted.

5. Worse. Great fœtor of breath; evidently sinking.

6. Died this morning.

Post-mortem Examination Twenty-four Hours after Death.

On opening the thorax, it was found that the right lung was entirely in a state of purulent infiltration. On the posterior surface of one of the lower lobes was an extensive cavity filled with pus; the left lung was engorged; heart healthy; liver nutmeg and granular; all the other viscera healthy.

The only remark which I feel it necessary to make is, might not the patient in all probability have been saved had he called in medical advice at the onset of the disease?

CASE

OF

ENCYSTED ABSCESS OF THE BRAIN.

By FREDERICK BROWNE, M.D.,
Physician to the Newbury Dispensary.

B. C., a young female of exemplary habits and not confined to a sedentary occupation, but of scrofulous aspect, having suffered from slowly suppurating cervical glands in early life, leaving extensive scars, was attacked with severe pain over the frontal region, and intense vomiting of a peculiar colored fluid mixed with the mucous secretion of the stomach, which resembled verdigris in the brightness of its green; pulse seldom above 90, but with heat of skin. This state, in spite of remedies, continued for many days. She appeared to pass through the stages of common gastric fever, protracted to the 28th or 29th day; she then appeared better; nourishment was freely taken, and the pain in the head, if not gone, was greatly mitigated, but was now altogether referred to the occiput. The stomach retained food, except when she turned on her left side, when vomiting was immediately excited; the strength, however, did not return; the countenance remained anxious; emaciation was extreme; hectic was set up, purulent expectoration, and death after an illness of seventy days. About ten days previous to dissolution, she requested that her body should be examined in my presence, and Mr. Lamb, the surgeon, who attended with me, proceeded to inspection twenty-four hours after death.

Head.—Dura mater thick, firm, free from vascularity; general venous congestion over the surface of

the cerebrum, and some effusion of lymph beneath the arachnoid; ventricles contained about three ounces of colorless fluid; substance of the brain firm; centrum ovale presented few bleeding points. Cerebellum firm, containing in the left lobe an encysted abscess with well defined walls, being a cavity which would contain a good-sized walnut, and filled with pus of a scrofulous appearance.

Thorax.—Both pulmonic plurae obliterated; the lungs adherent firmly almost throughout both sides; beneath the clavicles, large collections of tubercles in various stages of progression, with suppurating cavities.

Heart.—Small and pale.

Abdomen.—Liver indurated, not enlarged but divided in sections, presented a nutmeg appearance throughout. Examination was not carried further.

It is worthy of remark that there was during this protracted disease no delirium, no convulsion or paralysis, no earache, and the pain for a period was confined to the frontal portion. At one time partial amaurosis was thought to exist, but the pupils never wholly lost their activity.

Newbury, September 29, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, OCTOBER 8, 1842.

The second clause of an act, entitled "An Act for Regulating Schools of Anatomy," but better known as "the Anatomy Act," provided for the appointment of not fewer than three persons to be inspectors of places where anatomy is carried on. The appointments were vested in the Secretary of State for the Home Department, and in the Chief Secretary for Ireland.

We do not belong to that class of medical politicians who ridicule and reject every act of the executive, merely because such act emanates from persons having authority over us. We are not vain enough to imagine that nothing is right which does not issue from our own cranium—nothing just which may thwart our inclinations or fetter our passions. But, on looking back at the appointments which took place when the Anatomy Act first came into operation, we must say that, with a single exception, they were not calculated to give much satisfaction for the present, or encouragement for the future. Dr. Cragie was appointed inspector for Scotland, and against the propriety of such a selection we have not a word to offer. Dr. Somerville received the appointment for England, and Sir James Murray that for Ireland.

It is at all times a peculiarly painful task to have to deal with men instead of measures or facts; but when this task becomes a duty it must be fulfilled. The appointments of Sir James Murray and Dr. Somerville were not hailed with satisfaction by the medical profession. They could not be satisfactory. The one

gentleman was known as the *protégé* of a warm political partizan, and his impartiality was, from the outset, a suspected matter. The other gentleman was the most obsequious of vice-regal hangers-on, an honorary graduate of an university which has often degraded herself by similar acts of vice-regal sycophancy, and an itinerant vendor of a pharmaceutical preparation. The tree, it is said, may be known by its fruits. Of the manner in which affairs were conducted in Ireland we shall say nothing. The conduct of the Irish inspector appears to have been satisfactory; his certificate of good conduct is signed by many of the most eminent practitioners of Dublin—who also bear witness to the efficacy of his magnesia. In England affairs have not proceeded quite so smoothly. The first circumstance which excited dissatisfaction was the removal of Dr. Cragie from the office of inspector for Scotland, and the substitution of Dr. Somerville in his place. People could not easily understand why—if a Scottish inspectors were requisite—he should not be resident in Edinburgh, or for what useful purpose the administration of anatomical affairs should be concentrated in the hands of the same individual. The arrangement alluded to was, however, maintained, and for several years Dr. Somerville continued to fill the offices of inspector of anatomy for Scotland and England.

We are unwilling to scrutinize acts of which we necessarily have but an imperfect knowledge; instead of blaming the conduct of the English Inspector, we merely record events. His administration gave rise to several complaints from the anatomical teachers of the metropolis, and it was urged in particular that a certain university known to enjoy the favor of the inspectors' patron was treated with marked partiality in the distribution of anatomical subjects. During the existence of the Whig government the complaints of the teachers received, it is said, little attention. But "other men, other morals." The present Secretary of State for the Home Department ordered an investigation to be made, and the consequence has been, as we announced last week, that Dr. Somerville has ceased to hold the appointment of inspector of anatomy for England and Scotland. Mr. Bacot and Mr. Rutherford Alcock have been nominated inspectors for England and Wales; and Dr. Andrew Wood inspector for Scotland.

The number of English inspectors has thus been increased to two, and a resident inspector allotted to Scotland. So far these arrangements are satisfactory, but time alone can decide how far the improvements promised by Dr. Somerville's successors will be realised.

One of the arguments of the let-alone, expectant school of medical politicians is, that political, like

physical evils, have a constant tendency to correct themselves—that the good sense of the public, like the *vis medicatrix nature*, will in the long run cure the several evils by which our body politic is so sorely beset.

We confess that we are but moderate admirers of this milk and water practice. In medicine it may have some color of truth; in politics none. In the one case we leave the welfare of our patient to nature, simply from our inability to do him any good ourselves; but in the second case, the evil being manifest and its remedy at hand, there is no reason why we should voluntarily submit to an inconvenience which may be easily and instantly removed.

These reflections are suggested by the account of an inquest which is reported in a recent number of the "Observer" newspaper. We have, on more than one occasion, deplored the want of a medical police in this country, and pointed out the numerous evils which arise from the culpable negligence of the executive government in all matters connected with public health. Amongst others, we have mentioned the careless way in which substances of the most deadly nature are retailed by chemists and druggists. In France, and in most continental states, the sale of poisonous substances is expressly forbidden, except under the authority of a prescription signed by a legally-qualified medical man. In this country any chemist or druggist can furnish the means of self-destruction or murder for a few pence, and in too many instances have done so with the utmost indifference. The sale of a poison is regarded as a mere act of commercial intercourse; *tant pis* for the unfortunate victim of error or passion; he has the benefit of a coroner's inquest; the vendor of the poison receives a reprimand, and things resume their natural course—that is, arsenic and oxalic acid are retailed without compunction, and men are hurried from time into eternity, because, forsooth, we must not interfere with the liberty of the subject.

Surely it is time that such things should cease. Is it too much to ask a protection for human life, by requiring every person who sells a destructive substance to mark *poison* on it? and when experience shows that tradesmen refuse to employ this simple precaution, is it unjust or unreasonable to demand that they shall be so compelled by law? How many lives must be sacrificed before the attention of our law-givers is directed to this simple but important subject?

But to return to the inquest, the following particulars of which we derive from the "Observer." It was holden on the body of Miss Elizabeth Campbell, forty-four years of age, residing at 19, Golden-square, who was supposed to have died from poison. The witnesses examined proved that Miss Campbell had been confined to bed by illness for several weeks, and attended by Mr. Johnson, a general practitioner residing in

Beak-street, close by. On Friday, the 16th ult., Mr. Johnson saw the deceased, and finding that she suffered from considerable sickness of stomach, ordered her a *tablespoonful of potash water*, diluted with an equal quantity of milk. The order was a *verbal* one, but Mr. Johnson in his examination affirmed that "he had offered to write it down." The servant went to Mr. Fowler, of Brewer-street, and demanded a small quantity of potash water: she was asked for what purpose it was required, but said she did not know. An ounce bottle of the *liquor potassæ* (labelled potash water) was then given to her; she brought it at once to the patient's house, and a tablespoonful mixed with an equal quantity of milk was administered to the unfortunate sick woman. Immediately on taking it she exclaimed, "You have poisoned me—I am all on fire," and appeared to be in very great pain. Every effort was made to counteract the effect of the poison, but the patient sunk on Thursday, the 30th September, having been attended for some time by Mr. Copeland and Dr. M'Leod.

The evidence of Mr. Johnson we shall give without abridgement.

"Mr. Francis Johnson, the surgeon, deposed that he had attended the deceased since the 9th ult., for an attack of inflammation of the membrane covering the bowels. In consequence of the great sickness she labored under, nothing stayed on her stomach, and witness ordered her on the 16th ult. to have some potash-water, telling her sister, who was at the time at the side of her bed, that it was an effervescing beverage like soda-water, and offered to write it down, so particular was he in his description; but Miss H. Campbell said it was not necessary. Witness then left the house, and on his return home from Peckham, about three o'clock, was informed by his assistant of what occurred, upon which he immediately went to deceased's residence, and found her in bed, everything having been done that could be, the poison having been extracted from her stomach, and the proper antidotes continuing to be applied.

The foreman inquired if Mr. Johnson had seen the stuff that was sent by the chemist for potash-water.

The witness replied that he had. He then produced an ounce phial containing a deep yellow liquid, and said the contents was a caustic preparation of potash, of a burning and poisonous nature, and was only used medicinally by drops in a diluted state. Witness had since learned, to his surprise, that it was frequently sold by chemists for potash water. The witness then produced a bottle of the real potash water, which completely resembled, both in color and appearance, a bottle of soda water.

Examination resumed—At the time the deceased swallowed the stuff she had a dozen leeches on to lessen the inflammatory symptoms, but they became very much increased, and she got gradually worse, until the 21st ult., when witness expressed his fears very strongly to her sister, and advised her to have further advice. Mr. Copeland, of Golden-square, and Dr. M'Leod, were accordingly called in, who

recommended a continuance of the same medicine witness had prescribed, and Dr. McLeod continued in attendance until Monday last, when it was anticipated the deceased would recover. She apparently continued to improve until about four o'clock on Thursday morning, when a change took place, and she died on the same day. Had since made a post-mortem examination of the body, and had found, on examining the stomach, evidence of very extensive and old disease. There were two large cysts, and a mass of disease generally. The stomach was redder than usual, being ecchymosed in the texture. Witness had also tested the contents. Although he had then found sufficient to account for deceased's death, he opened the head and found a clot of blood in the brain, and, in witness's opinion, she died from apoplexy.

The foreman inquired of the witness if that, in his opinion, has been caused by the effect of the poison she had taken.

Witness said it was impossible to say, but from the effect she described it had upon her, as of her head going through the ceiling, it might have accelerated her death. The clot was about the size of a nut, and there was also effusion of serum. The cyst he had described was an immense one, the slightest pressure on which might have caused apoplexy."

There are several points in this history which require remark. In the first place, the coroner, Mr. Higgs, was decidedly wrong in entrusting the post-mortem examination of the deceased to Mr. Johnson, and in bringing him forward as the medical witness. We do not for a moment pretend to insinuate that the evidence of Mr. Johnson was not strictly in conformity with truth—that he did not faithfully communicate to the jury what he saw and thought; but the medical facts of the case should have been elicited from some other medical man, and not from the one who might be supposed to be connected, even in a remote manner, with the unfortunate accident which had occurred in his practice. This is a rule of evidence so simple, and so universally followed in other courts of justice, that we are astonished it did not suggest itself to Mr. Higgs; but we fear the deputy for Westminster will never mend.

The life of Miss Campbell was evidently compromised by want of sufficient caution on the part of the chemist or his assistant. She might have died naturally, but no medical witness could refuse to acknowledge that the ingestion of a tablespoonful of the liquor potassæ into a stomach already inflamed was not directly calculated either to hasten death or convert a mild into a fatal inflammation of that organ. Mr. Johnson we acquit of any blame in the transaction. We have made inquiries from several respectable chemists, and find that the designation *potash water* could not be taken to signify anything else than the effervescing fluid, analogous to soda water, which has been introduced amongst the trade within the last two years. The *liquor potassæ*, if our informants be

correct, is never called potash water. Still we think that Mr. Johnson should have committed his ordonnance to writing. In his own mind, he had prescribed a very innocent beverage, and, therefore, imagined that no caution was necessary; but experience has proved, over and over again, that the medical man cannot depart without danger from those rules of conduct which time has established. The names of different remedies are so apt to be confounded together, a trifling deviation from the proper dose, or the precise designation of a remedial agent, is sometimes so fatal, that the medical attendant should, in no instance, depart from the wholesome custom of committing his directions to paper. We must not shut our eyes against our own faults, while we scrutinise the failings of our neighbours; if we insist on the chemist's being cautious in his preparation and delivery of remedies, we must be equally cautious in our manner of ordaining them. Neither principle, we regret to say, was attended to in the present unfortunate case. Mr. Fowler should not have delivered a bottle of *liquor potassæ* to a person who was ignorant of the purpose for which it was required, without writing poison on it. The precaution might have saved the life of a fellow-creature, and those who will not adopt it through humanity should be compelled to do so by law.

REVIEWS.

The Simple Treatment of Disease deduced from the Methods of Expectancy and Revulsion. By JAMES M. GULLY, M.D. London: Churchill, 1842, 8vo. pp. 198.

The treatment of disease does not simply consist in the administration of remedies, and the adage "anceps remedium," &c. is not altogether orthodox.

The giving of a bolus or a clyster does not constitute the medical practitioner; were such the case we should be compelled to admit the definition of Voltaire, "Un medecin est un homme vetu de noir, mettant de drogues qu'il ne connait gueres, dans un corps qu'il ne connait pas."

The skill of the scientific practitioner is often more clearly manifested in his abstinence from what are called remedial means, or in having recourse to them only as auxiliary to the efforts of nature, which are his surest and his sole guide.

Such are the principles of which Dr. Gully boldly presents himself as the advocate—we say boldly, because it required no common degree of courage to appeal to nature from calomel and the close-stool—to the simple mode of treatment from the bleeding, purging, blistering method, complacently denominated "active practice," in the nomenclature of modern medicine-mongers.

Dr. Gully is a follower of the eclectic school, in-

clining rather to the Hippocratic doctrine, that "nature alone cures all diseases," but not rejecting the revulsive mode of treatment in certain complaints, and especially at certain periods of them. His book contains a number of judicious remarks on the state of the body in health and disease, and is replete with sound doctrines of practice which deserve greater attention, inasmuch as they are sadly overlooked by writers and teachers of the present day. Many objections will probably be raised against his theories, and many more against his treatment, which will be condemned as trifling, inert, and absurd; but we are persuaded that the reflecting and scientific practitioner will find much to approve and adopt.

We had intended, according to custom, to draw up a brief analysis of the views and reasonings of the author; but the following extract from the concluding pages of his work is explanatory enough, and may be more acceptable to our readers:—

"Disease commences on the external surface, or skin; the internal surface, or viscera of vegetative life; or in the brain and spinal cord, the viscera of animal life.

Commencing on the external surface, it is propagated to the internal and to the brain. Commencing in the internal surface, it is propagated to the external and to the brain. Or in the brain, to the viscera of vegetative life and the skin.

So long as disease commencing in the skin is not propagated beyond a certain degree to the viscera, life is not compromised. So long as disease commencing in the viscera of the abdomen and chest is not propagated beyond a certain degree to the brain, life is not compromised. So long as disease commencing in, or propagated to, the brain, does not react on the other viscera beyond a certain degree, life is not compromised. Hence the axiom that "death comes only by the viscera." The great aim of treatment, therefore, is to withdraw irritations from the viscera, and to save animal life. The dependence of the abdominal viscera upon, and their connexion with, the brain, is not so great and immediate as those of the chest. General febrile states, whether owing to inflammation or irritation of the abdominal mucous lining or not, certainly begin and disappear with them. The same applies to chronic diseases of that membrane. In preventing the propagation of these to the brain, the expectant treatment is applicable, for the reason given in the last paragraph. In the acute disorders of the coverings of the abdominal viscera, the propagation to the brain being more speedy, revulsion is more demanded.

The dependence of the thoracic viscera upon, and their connexion with, the brain, is more immediate than those of the abdomen. Revulsion on the latter is therefore necessary and proper in acute diseases of the chest. In its chronic disorder, revulsion on the external surface is more decidedly indicated. Disease of the brain invariably operates on the viscera of the abdomen and chest. If acute, it requires active revulsion both on the internal and external surfaces. If chronic, the viscera of vegetative life becoming deeply affected and reacting upon the brain, revulsion

on them is not so applicable as on the external surface.

In all disease, the end of treatment is to spare the viscera. When the abdominal viscera are prominently disordered, they should be spared at the expense of the skin. When the viscera of the chest and the brain are the seats of disorder, they should be spared at the expense of the digestive organs and the skin. These general principles may be met by individual cases of disease to which they do not accurately apply in all particulars. But let me ask what rules of practice do so apply? The most that can be done in this respect is to combine the greatest simplicity with the most extensive applicability, to lay down rules which shall include the necessities of the morbid body and the safest mode of answering them by remedial means. And although these should fail to comprehend all possible instances, it is better far to be led by an imperfect code than to wander about carelessly, armed with, and eager to employ, the dangerous weapons which are to be found in the storehouse of medical remedies.

As regards the details of the simple treatment, it may be remarked that they all tend to relieve diseased organs by means of other and less immediately important parts. Of the various modes of exciting the activity of the skin, those which augment the transpiration of its fluids are most applicable to the acute disorders of the viscera of the abdomen and chest. In these, fomentations with hot water or opiate decoctions cannot be too much recommended. No anodyne whatever equals the soothing effects of fomentation of the abdomen in the various kinds of fever. Children almost always fall asleep during its employment, and adults acknowledge its power to subdue the restlessness that is so intolerable in some febrile cases. When the animal nervous system is considerably affected, as in typhoid fever, the quantity of blood drawn to the skin should be further increased by the addition of stimulating matters to the water for fomentation. The difficulty is to persuade the patient's attendance to persevere sufficiently in the use of this simple remedy;—it is too simple for the majority of nurses, and, moreover, renders their office somewhat more onerous. Excitation of the skin by means of rubefacients, dry heat, and dry frictions, is more adapted to chronic disorders of the abdominal and thoracic viscera than are fomentations with hot fluids.

Powerful rubefacients, such as mustard plaster, and strong ammonia, and blisters, are more applicable to disorder of the head than of the vegetative viscera. Simple treatment also lays considerable stress on the agreeable sensations of the skin, which are best attained by regulation of atmospheric temperature, sponging, washing, &c. Cleansing of the bowels by lavements and very mild laxatives is demanded in the general febrile state and acute and chronic disease of the digestive canal. Drastic purging is requisite only in acute and pressing disorder of the head. Emetic remedies to the amount of producing nausea are required in acute affections of the lungs, and in some, to the amount of causing vomiting. The purging that attends the use of emetics in lung disease is generally sufficient for the occasion. Venæsection is appropriate in acute disorders of the heart, lungs, and head, but should always be practised with various considerations for the future as well as the present condition.

It is inapplicable in chronic diseases. Blood-letting by leeches is the best mode of sanguineous depletion in acute disorders of the abdominal viscera, and may often be substituted for general bleeding in some pulmonary inflammations. Minute quantities of blood are beneficially abstracted by leeches in chronic inflammations of all the viscera, both of vegetative and animal life. Cupping is best employed against disorders of the head of an acute character, or when chronic disease there has produced effusion of blood and compression.

Of opiates the best are those which act by removing the cause of irritation, not masking it, and they will be found in some of the preceding means. Direct anodynes, internally administered, are only proper when the symptoms of nervous excitement at least equal those of the circulatory—a state that is most frequently seen in some chronic disorders of the lungs. Quietude of the deranged viscus is requisite in all special diseases. And as in general febrile states all the viscera are more or less involved, this rule implies rest of the entire organism in fever. Quietude of the muscular system is indispensable in all functional disorders of all the viscera, save the chronic dyspepsia which depends on nervous more than circulatory derangement, such as that attendant on certain forms of hypochondriasis. Stimulation is allowed only when, after a prolonged or severe febrile effort, the organic powers give indications of incapability to renew the rhythm of healthy function. It requires much care to appreciate these signs, and measure the amount of stimulus required. The necessity for stimulus depends materially on the previous treatment; the close observation of the two preceding rules obviating to a great extent the necessity in question. The mind should be maintained as nearly as possible in a state of monotony in all acute complaints, and be diverted as much as possible from the contemplation of all chronic disorders of the body. To enable the patient to effect these, the reasoning rather than the prescribing powers of the physician are demanded. Lastly, whatever the disease, the remedies are to be addressed to the pathological state which produces it—a morbid condition, and not a name, is to be treated.

Thus, although based on simple rules, and consisting chiefly of simple remedial means, the treatment advanced in this work is not the result of superficial views. It congregates the facts of disease, and deals with them *en masse*; differing in this from the complex treatment which takes the facts in their isolated condition, and treats them *seriatim* as they appear—a process that requires but small ingenuity and no great degree of observation. This is a complex practice, preceded and accompanied by no complicated mental effort—it is the practice of mere routine. But simple treatment, flowing from a mental review of all the facts of disease, is not a process that can be effected in a slovenly manner; it calls the attention to every the most minute particular referring to the patient; it demands the exercise of tact in rendering the details of treatment, simple as they are, subservient to the unravelling of the knot of morbid signs; and especially does it suppose the exertion of the reasoning power upon, and that of obtaining the confidence of, the patient, when, according to its dictates, remedies that have no mysterious air and apparently insignifi-

cant, are relied on for the cure of severe disease. Simple treatment, in short, although easier to the patient, is the most laborious to the practitioner; the latter must give all his energy of thought and attention, must sacrifice all the eclat which surrounds the multifarious prescriber of drugs in the eyes of the uninstructed, to the means by which the former may be most easily rescued from the present malady, and most certainly protected from its devastating consequences."

ACADEMY OF SCIENCES, PARIS.

September 19, 1842.

EMPHYEMA.

M. Faure, senior surgeon to the Military Hospital of Toulon, read a memoir on the operation for emphyema. The author wishes to show that in most cases of purulent effusion into the thoracic cavity, paracentesis thoracis is the only means we have of rescuing the patient from almost certain death, and that the operation has been too much neglected, either because its danger was overrated, or its indications not properly laid down.

M. Faure asserts that puncture of the chest with a trocar does not expose the patient to the danger of air being introduced into the pleura, and that the wound often closes in forty-eight hours.

He asserts that 200 persons die annually, whose lives might be prolonged or saved by our having recourse to paracentesis, and relates the cases of three soldiers on whom he operated in April and May last. They had been reduced to a very dangerous state by the effusion. One died a few days after the operation, but the other two were still alive, when last heard of on the 31st of July.

STRUCTURE OF THE LUNG.

M. Bourguery read a memoir on the relation which exists between the structure of the lung and its functional capacity in both sexes and at different periods of life.

The author first gives the measurements of the minute pulmonary apparatus in the adult, and then passes to the microscopic examination of its texture at different periods of life. He shows that the developments of the aerial and sanguineous capacities of the pulmonary apparatus is much influenced by age, appearing to be in inverse proportion at the two extremes of life.

In infancy the vascularity and aerial capacity of the lung are very great, and this, perhaps, may occasion the extreme plasticity of the blood at this period.

The great energy of the respiration, arising from the full but equal development of the sanguineous and aerial systems, is characteristic of adolescence, and manifests itself by the rich qualities of the blood peculiar to puberty.

In the adult the respiratory apparatus remains stationary for some time, but as years go on the air-cells partially give way, and the blood-vessels become obliterated, and old age ensues with its feeble and impoverished circulation.

From these facts the author thinks that, in a general point of view, man at his different periods of life presents an analogy to the two classes of vertebrate

animals in which the extremes of the respiratory function are observed.

As he approaches towards puberty the lung is gradually developed, and offering every year larger and larger surfaces to the air, gives rise to a function similar to that of the bird. In old age, on the contrary, the lung is gradually broken up into air cavities of increasing magnitude, while the circulation is diminished in the same proportion; and thus the respiration, both in its real capacity and in the structural changes of the organ effecting it, assumes the characters peculiar to reptiles.

NERVOUS ASTHMA.

M. Ducros, of Marseilles, presented a memoir on nervous asthma. The author has found from experience that the application of ammonia, at 25°, over the back of the cervical vertebrae and opposite the pharyngeal plexus, is capable of arresting in a majority of cases attacks of nervous asthma. He adduces nine cases in support of his assertion.

APHTHÆ OF THE NECK OF THE UTERUS.

M. Conté lays down, in a memoir addressed to the academy, that aphthæ of the neck of the uterus, though not described by writers, is a very frequent affection.

September 26, 1842.

SOME REMARKS ON THE MECHANISM OF THE CIRCULATION OF THE BILE IN THE BILIARY CANALS.

By M. Amussat.

In this memoir the author develops an idea put forth by him in 1829, on the cause of the ascension of bile along the ductus choledocus to the gall-bladder; it seems to him to depend on the narrowness of the duodenal opening of the duct, and on the spinal arrangement of the valves of the cystic duct, observed in man and the monkey only. The author refutes the opinion of those anatomists who deny the existence of muscular fibres in the gall-bladder; they are easily recognised in cases of hypertrophy of the gall-bladder consequent on obstruction of the ductus choledocus.

The author has studied the arrangement of the biliary apparatus in a great number of animals; in some, as the horse, ass, stag, we find no gall-bladder; the hepatic canals unite in a common trunk, which opens by a very narrow orifice into the duodenum, in the ox, sheep, pig, &c., there are no cystic valves. The following are the conclusions drawn by the author:—

1. The gall-bladder and the excretory biliary ducts are furnished with muscular fibres, and the apparatus composed of these parts discharges its contents, not only under the influence of pressure, but probably also of contraction.

2. The cystic valves, which are found only in men and monkeys, have a spiral arrangement. This was first pointed out by Ruysch, but subsequently forgotten, and seems to the author to have the double effect of favoring the ascension of the bile and preventing its discharge too suddenly.

3. The narrowness of the orifice of the ductus communis, as compared with the calibre of the duct itself, is the physical cause which compels the bile to ascend to the gall-bladder; an additional proof of the influence of physical causes over our functions.

4. The position and relative situation of parts com-

posing the biliary apparatus refute the idea that in the erect position the bile can find its way, by simple gravitation, into the duodenum.

5. In animals, in which there is no hepatico-cystic duct, the bile ascends against its own weight into the gall-bladder, and, as was said before, this arises from the physical disposition of the orifice of the ductus choledocus.

6. Comparative anatomy confirms the result of the researches made on the human subject. Thus in all quadrupeds the bile ascends against its own weight.

7. Experiments on living animals show that it is impossible to make the gall-bladder contract in the same way as the urinary bladder; still it does contract, because it empties itself in a very short space of time before the experimenter; the biliary canals, on the other hand, contract very evidently in birds, more strongly even than the intestines; the orifice of the ductus communis is very small, and the bile is forced out, drop by drop, as if it were distilled.

ACADEMY OF MEDICINE.

September 20, 1842.

ASCITES.

By Dr. Lecanus.

A woman, 36 years of age, was attacked in 1823 with chronic inflammation of the bowels, accompanied by emaciation, suppression of urine, and irregular menstruation. Effusion gradually took place in the cavity of the peritoneum; the patient was now tapped, and twenty quarts of clear yellowish serum drawn off, when extensive indurated tumors were felt in the abdomen. Ten days afterwards it became necessary to operate again, but the fluid accumulated so rapidly that the author was forced to draw it off every eight, ten, or twelve days. Fifteen years passed away in this manner, and the abdomen had been tapped 810 times, when M. Lecanus conceived the idea of applying methodical pressure to the abdomen by means of pasteboard splints; the accumulation of fluid was thus impeded, and at the end of six months, during which the abdomen was punctured fifty-six times, the fluid was no longer effused. Two years have now elapsed, and the patient remains perfectly well, after an illness of sixteen years, and having undergone the operation of paracentesis 866 times. On one occasion only was the epigastric artery wounded, but the bleeding was soon arrested by a compress steeped in a styptic fluid.

STAPHYLOPATHY.

M. Blandin presented to the academy a young man on whom he had operated, with complete success, for congenital division of the velum palati and the whole of the roof of the palate. There now remains nothing but a small hole behind the alveolar arch, which M. Blandin proposes to close with an obturator.

September 27, 1842.

REPRODUCTION OF THE HUMERUS.

M. Racord presented a portion of osseous matter which had been produced as a substitute for the humerus. A man received very severe injury of the fore arm from the explosion of a gun, and had the limb amputated just below the elbow-joint. The stump was attacked by gangrene, which extended to the upper part of the arm; but the weakness of the patient prevented amputation at the shoulder-joint from

being had recourse to. In a month the gangrenous parts had all fallen off, and the humerus was exposed anteriorly up to the bicipital groove, the two upper thirds of the posterior surface being covered by the triceps; on the sixth month the humerus slipped out of the joint; an incision was now made through the remaining muscular tissues, and the bone was removed. The patient was thus left with a long, deformed stump, which was healing slowly, when two months afterwards the fleshy mass assumed a round appearance and became firm, while fragments of bony matter were discharged through the lower edge of the stump.

In this state, about eleven months after the accident, the patient was admitted under the care of the author, in the Smyrna hospital. The remnant of the limb was now amputated at the shoulder-joint, and, on examining it, the new formed bone was discovered. It was of considerable size, being twenty-two cents. long, by three to four large. At the upper part there was an articular surface, corresponding exactly to the glenoid cavity, with which it was united by ligamentous matter, enveloping the newly formed joint; at the upper and inner part there was also an articular process, which was connected by ligamentous bands with the third rib.

THEORY OF DISEASE.

By JUSTUS LIEBIG, Ph. D.

Every substance or matter, every chemical or mechanical agency, which changes or disturbs the restoration of the equilibrium between the manifestations of the causes of waste and supply, in such a way as to add its action to the causes of waste, is called a *cause of disease*. *Disease* occurs when the sum of vital force, which tends to neutralise all causes of disturbance (in other words, when the resistance offered by the vital force), is weaker than the acting cause of disturbance.

Death is that condition in which all resistance on the part of the vital force entirely ceases. So long as this condition is not established, the living tissues continue to offer resistance.

To the observer, the action of a cause of disease exhibits itself in the disturbance of the proportion between waste and supply which is proper to each period of life. In medicine, every abnormal condition of supply or of waste, in all parts or in a single part of the body, is called disease.

It is evident that one and the same cause of disease will produce in the organism very different effects, according to the period of life; and that a certain amount of disturbance, which produces disease in the adult state, may be without influence in childhood or in old age. A cause of disease may, when it is added to the cause of waste in old age, produce death (annihilate all resistance on the part of the vital force); while in the adult state it may produce only a disproportion between supply and waste; and in infancy, only an equilibrium between supply and waste (the abstract state of health).

A cause of disease which strengthens the causes of supply, either directly, or indirectly by weakening the action of the causes of waste, destroys, in the child and in the adult, the relative normal state of

health; while in old age it merely brings the waste and supply into equilibrium.

A child, lightly clothed, can bear cooling by a low external temperature without injury to health; the force available for mechanical purposes and the temperature of its body increase with the change of matter which follows the cooling; while a high temperature, which impedes the change of matter, is followed by disease.

On the other hand, we see, in hospitals and charitable institutions (in Brussels, for example) in which old people spend the last years of life, when the temperature of the dormitory, in winter, sinks two or three degrees below the usual point, that by this slight degree of cooling the death of the oldest and weakest, males as well as females, is brought about. They are found lying tranquilly in bed, without the slightest symptoms of disease, or of the usual recognizable causes of death.

A deficiency of resistance, in a living part, to the causes of waste is, obviously, a deficiency of resistance to the action of the oxygen of the atmosphere.

When, from any cause whatever, this resistance diminishes in a living part, the change of matter increases in an equal degree.

Now, since the phenomena of motion in the animal body are dependant on the change of matter, the increase of the change of matter in any part is followed by an increase of all motions. According to the conducting power of the nerves, the available force is carried away by the nerves of involuntary motion alone, or by all the nerves together.

Consequently, if, in consequence of a diseased transformation of living tissues, a greater amount of force be generated than is required for the production of the normal motions, it is seen in an acceleration of all or some of the involuntary motions, as well as in a higher temperature of the diseased part.

This condition is called *fever*.

When a great excess of force is produced by change of matter, the force, since it can only be consumed by motion, extends itself to the apparatus of voluntary motion.

This state is called a *febrile paroxysm*.

In consequence of the acceleration of the circulation in the state of fever, a greater amount of arterial blood, and, consequently, of oxygen, is conveyed to the diseased part, as well as to all other parts; and if the active force in the healthy parts continue uniform, the whole action of the excess of oxygen must be exerted on the diseased part alone.

According as a single organ, or a system of organs, is affected, the change of matter extends to one part alone, or to the whole affected system.

Should there be formed, in the diseased parts, in consequence of the change of matter, from the elements of the blood or of the tissue, new products, which the neighbouring parts cannot employ for their own vital functions; should the surrounding parts, moreover, be unable to convey these products to other parts, where they may undergo transformation, then these new products will suffer, at the place where they have been formed, a process of decomposition analogous to fermentation or putrefaction.

In certain cases, medicine removes these diseased conditions, by exciting in the vicinity of the diseased

part, or in any convenient situation, an artificial diseased state (as by blisters, sinapisms, or setons); thus diminishing, by means of artificial disturbance, the resistance offered to the external causes of change in these parts by the vital force. The physician succeeds in putting an end to the original diseased condition, when the disturbance artificially excited (or the diminution of resistance in another part) exceeds in amount the diseased state to be overcome.

The accelerated change of matter and the elevated temperature in the diseased part show, that the resistance offered by the vital force to the action of oxygen is feeble than in the healthy state. But this resistance only ceases entirely when death takes place. By the artificial diminution of resistance in another part, the resistance in the diseased organ is not indeed directly strengthened; but the chemical action (the cause of the change of matter) is diminished in the diseased part, being directed to another part, where the physician has succeeded in producing a still more feeble resistance to the change of matter (to the action of oxygen).

A complete cure of the original disease occurs, when external action and resistance, in the diseased part, are brought into equilibrium. Health and the restoration of the diseased tissue to its original condition follow, when we are able so far to weaken the disturbing action of oxygen, by any means, that it becomes inferior to the resistance offered by the vital force, which, although enfeebled, has never ceased to act; for this proportion between these causes of change is the uniform and necessary condition of increase of mass in the living organism.

In cases of a different kind, where artificial external disturbance produces no effect, the physician adopts other indirect methods to exalt the resistance offered by the vital force. These methods, the result of ages of experience, are such, that the most perfect theory could hardly have pointed them out more acutely or more justly than has been done by the observation of sagacious practitioners. He diminishes, by blood-letting, the number of the carriers of oxygen (the globules), and by this means the conditions of change of matter; he excludes from the food all such matters as are capable of conversion into blood; he gives chiefly or entirely non-azotised food, which supports the respiratory process, as well as fruit and vegetables, which contain the alkalies necessary for the secretions.

If he succeed, by these means, in diminishing the action of the oxygen in the blood on the diseased part, so far that the vital force of the latter, its resistance, in the smallest degree overcomes the chemical action; and if he accomplish this, without arresting the functions of the other organs, then restoration to health is certain.

To the method of cure adopted in such cases, if employed with sagacity and acute observation, there is added, as we may call it, an ally on the side of the diseased organ, and this is the vital force of the healthy parts. For, when blood is abstracted, the

external causes of change are diminished also in them, and their vital force, formerly neutralised by these causes, now obtains the preponderance. The change of matter, indeed, is diminished throughout the body, and with it the phenomena of motion; but the sum of all resisting powers, taken together, increases in proportion as the amount of the oxygen acting on them in the blood is diminished. In the sensation of *hunger*, this resistance, in a certain sense, makes itself known; and the preponderating vital force exhibits itself, in many patients when hunger is felt, in the form of an abnormal growth, or an abnormal metamorphosis of certain parts of organs. *Sympathy* is the transference of diminished resistance from one part, not exactly to the next, but to more distant organs, when the functions of both mutually influence each other. When the action of the diseased organ is connected with that of another—when, for example, the one no longer produces the matters necessary to the performance of the functions of the other—then the diseased condition is transferred, but only apparently, to the latter.

(To be continued.)

M. BOUILLAUD.

M. Bouillaud has been re-elected member of the Chamber of Deputies at Angoulême, by a majority of forty-six votes.

PROMOTIONS AND APPOINTMENTS.

MILITARY.

16th Regiment of Light Dragoons—Surgeon Backshall Lane Sandham, M.D., from the 62nd foot, to be surgeon, vice Harcourt, deceased.

22nd Foot—Assistant-surgeon Alexander Campbell, to be surgeon, vice Ore, appointed to the 62nd foot.

62nd Foot—Surgeon James Alexander Ore, from the 22nd foot, to be surgeon, vice Sandham, appointed to the 16th Light Dragoons.

NAVAL.

Assistant-surgeon C. R. Brier, of the Royal George yacht, to be surgeon.

BOOKS RECEIVED.

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COURSE

OF

LECTURES ON ORGANIC CHEMISTRY,

AS APPLIED TO

MANUFACTURES AND AGRICULTURE.

By M. PAYEN, Member of the Institute.

LECTURE I.

*Chemical Composition of Plants—Cellular Tissue—
Vascular and Ligneous Tissues—Properties of
Cellulin—Vegetable Albumen—Nitrogen.*

GENTLEMEN,—Vegetables and all their organs are composed of a tissue formed by cells collected together; this arrangement of cells has been denominated cellular tissue, the basis, or, if I may use the expression, the skeleton of the vegetable. Cellular tissue, then, is a collection of cells, but the form, adhesion, and thickness of these cells vary in an indefinite manner. The distinction of the fundamental tissue into proper cellular tissue, vascular tissue, and ligneous tissue is founded on the differences of form, &c., just alluded to.

The proper cellular tissue is composed, generally speaking, of cells which affect a circular form; it secretes the various immediate principles of plants, such as fecula, mannite, sugar, &c. The vascular tissue is composed of elongated cellules, which communicate with each other, and form tubes more or less closely set, through which the nutritious fluids of the plant are conducted. Vegetables also contain special vessels for the purpose of secreting special fluids.

The ligneous tissue of a plant is formed by the assemblage of elongated cellules, which at one period communicated together, but in their present state are filled with a very tenacious, solid matter; it is merely the vascular tissue which has ceased to convey vessels and has become obliterated. It constitutes *wood*, properly so called, and the tenacious fibres of flax, phormium tenax, &c.

The various cells are separated by inter-spaces of different sizes, called *intercellular spaces*; these are filled with the tenacious matter alluded to, or with air; sometimes they are empty. The cellular tissue of the apple affords a good example; if we press a portion of this fruit between the fingers, it becomes more opaque; if we throw it into water, it floats. The intercellular spaces sometimes contain the special principles of the plant, as resin, gum, essential oil, &c.

In order to give you some idea of the condition in which these immediate principles exist in the cells, it will be necessary to say a few words on the growth of the cells; we shall thus understand perfectly the gradual development of the plant, the layers of wood, &c. Every part of the plant was originally a cell, and the peculiar species of tissue is distinguished by the mode in which the cells are developed. Some-

times we find excessively minute cellules swimming in a fluid contained in the cellular envelope; they soon join the latter, and increase its volume, the cellule becoming developed from the centre towards the circumference. This is well seen in the root of the date-tree. Gradually the fluid of the cellule forms the different elementary substances peculiar to it; these fill the cellule and we have a ligneous cell. In other cases the cell assumes exactly the shape of a small bag; its walls are thin, and it contains a number of opaque globules floating in a fluid. This is a cell, properly so called, as in the potato, and the globules alluded to are so many grains of fecula. When the cellule is elongated, and communicates with the neighbouring cells, containing a viscid or clear fluid, we may conclude that it is a vessel or a vascular cellule. Finally, the *air-tubes* are exceedingly minute vessels, which conduct the air to the different parts of the plant; they are somewhat analogous to the air-tubes of insects, and can be detected by the naked eye in the leaves of the moscharis.

The form of the cells is extremely varied, and this difference of form assists us in explaining their functions. In the leaves, or respiratory organs of a plant, the cells are extremely irregular in shape, leaving vast intercellular spaces for the circulation of air; in the epidermis, on the contrary, they are likewise irregular, but are dovetailed in such a manner as to give the tissue a proper degree of strength and resistance. In some plants this condition of epidermis is requisite for their existence. The cactus, and other analogous plants of the torrid zone, could not retain the water which they hold in such quantity unless protected by an epidermis of this kind.

The manner in which the cells are collected together also varies considerably. In some cases the thickness of the wall of the cell exceeds the intercellular space; at other times the latter exceeds the diameter of the cell itself; this explains the hardness of certain woods and perisperms; and the soft, yielding nature of some leaves, fruits, &c. Thus the perisperm of the fruit of a certain species of palm-tree is so hard that it is employed for the same purposes as ivory in various ornamental works, and is denominated vegetable ivory. On the other hand, the cellular tissue of the Iceland moss is so soft, that it yields a species of jelly when boiled in water. Lastly, the hard and almost stony substance sometimes found in the interior of the pear, shows how closely the cells may be congregated together.

The physical arrangement of the tissue of plants is, as I have said, susceptible of infinite variety; but its chemical composition is exceedingly simple. Whatever be the nature of the cell, its ultimate principle is the same—the cellulin of M. Dumas. The term cellulin was at first objected to by some, who thought that the vascular and ligneous tissues were not com-

posed of cells, but its correctness is now placed beyond a doubt.

But to return to the vegetable secretions. As the organic arrangement of the ultimate vegetable tissue presents some analogy to that of animals, so do their secretions. Vegetable albumen is identical with animal albumen (white of egg, albumen of the blood); gluten is analogous to caseum, and the starch contained in the cells of the potato resembles cellulin in the closest manner. Inuline, an immediate principle contained in the cells of the dahlia, inula helenium, &c., is analogous to fecula; cane sugar is contained in the beet root; raisin sugar in the malleoli of many sweet fruits; finally, different coloring matters, the fixed and essential oils, vegetable alkalis, and even the mineral salts, are enclosed in the ultimate tissue of the vegetable kingdom. Thus, plants secrete not only the vegetable alkalis, but likewise contain mineral alkalis and salts, which they have derived from the bosom of the earth, and which we separate from them by incineration.

But a more curious fact, which I recently communicated to the Academy of Sciences, is that several of the salts alluded to are found in a state of crystallisation, modified according to the cellular arrangement of the secreting organ. Meyer, a German physiologist, discovered a quantity of crystallised mineral substances under the epidermis of the leaf in certain species of the fig-tree. I have paid much attention to the origin, nature, and arrangement of these mineral substances, and have found many examples of their existence in the numerous family of urticaceæ.

In the fig-tree these crystals are composed of carbonate of lime, and are secreted by a particular organ, which comprises two parts—first, a cellular cord attached to the inner surface of the epidermic layer, analogous to the surrounding tissues, and remaining unchanged during the different periods of vegetation; second, of a tissue formed of the small cells containing the crystals, and suspended like a lustre from the extremity of the cord just mentioned. The arrangement of the integral molecules of these crystals is various; so also is their relation to the surface of the leaf. The number of calcareous concretions found in the pili of a leaf of the *broussonetia papyrifera* amounted to 134,000. The carbonate of lime concretions assume the cuboid form; those of oxalate of lime, especially such as are found in the wall pellitory, are excessively fine, elongated needles—a form never presented by crystals of the oxalate in our laboratories. Lastly we may remark, that experiments made on plants of the same species, and indicating a variable proportion in the quantity of carbonate of lime which they contain, seem to confirm the opinion of some physiologists, who think that plants do not take up indiscriminately the different mineral substances with which they may be placed in contact.

The vegetable albumen, which is contained in such large quantities in vegetable tissues, and performs functions analogous to those of the mucous membrane in animals, communicates to the ligneous cells (and consequently to wood) the aptitude of taking on the dry or moist putrefactive process; for this albumen is an azotised substance, and identical with an animal matter which is in the highest degree prone to putrefaction. The absence of albumen, and the com-

pactness of the ligneous fibres in acacia wood, explain why it remains sound under circumstances which destroy every other kind of wood.

Theory, then, points out to us the different uses of the vegetable substances exclusively composed of cellulin. When the ligneous fibres of a plant are long, flexible, tenacious, and capable of being bleached, we employ them for the purpose of making tissues such as linen, cotton, &c. The marrow of the *eschinomena paludosa*, when cut into thin plates, furnishes us with sheets of paper exactly similar to that in ordinary use, and with pure cellulin, which is easily bleached, and when stained is well suited for the manufacture of artificial flowers, &c. Theory likewise points out to us the means of preserving wood from putrefaction by removing the albumen, or combining it with mineral substances; but I shall return to this interesting subject in my next lecture.

The analogy between cellulin and starch has been recently confirmed in a very remarkable manner. It is well known that the tincture of iodine detects the slightest trace of starch contained in any vegetable tissue; now, by producing a slight disaggregation of particles in cellulin with the aid of a strong acid, and then applying an aqueous solution of iodine, we obtain a blue color. To effect this the following precautions must be observed:—A very white skein of cotton is lightly touched with a rod moistened with concentrated sulphuric acid, and a solution of iodine is then immediately placed in contact with the surface on which the acid is acting. A beautiful blue tint is at once seen, and may be increased by adding some water to arrest the action of the sulphuric acid. When too much acid is used, the tissue is destroyed too rapidly, and the blue color does not appear. Hence, concentrated sulphuric acid disorganises the cellulin, and changes it into a matter soluble in water and identical with gum, or rather dextrine, and the conversion thus effected is perfectly analogous to that which the same acid produces in starch. Chlorine and solutions of the alkaline chlorides act powerfully on cellulin. When a piece of linen is thrown into a boiling solution of chloride of lime, it excites a brisk effervescence and disappears. The hydrogen of the water unites with the chlorine to form hydrochloric acid, while its oxygen unites with the carbon, and produces carbonic acid; hence the effervescence, which is assisted by the heat and the presence of hydrochloric acid. That such is the case, can be easily proved by making the experiment in a small balloon, to which is attached a tube communicating with a bottle of lime water. The bleaching property of dew is explained on the same principle; the dew contains more oxygen than common water, and the oxygen combining with minute portions of the carbon contained in cellulin gradually removes the former, and whitens the tissue. The powerful action of chlorine and its compounds on cellulin should render manufacturers cautious how they employ them for the purposes of bleaching; when paper is acted on too long by them its force of resistance is destroyed, and after some time it falls into powder. The same remark is applicable to washerwomen, who often injure linen by employing the chloride of potass too freely. While on this subject I must not omit to mention the action of nitric acid on cellulin, and the

discovery of M. Pelouze. When a bit of rag or paper is treated for some time with very dilute nitric acid and water slowly evaporated, the acid becomes incorporated with the ligneous matter, yielding to it its oxygen, and giving off nitrogen. The product obtained is a highly oxygenated cellulin, which ignites spontaneously, like a fulminating powder, when placed in contact with a body heated from 150 to 200 degrees.

I shall conclude this lecture, Gentlemen, by reminding you that nitrogen does not enter into the ultimate composition of vegetable tissues, while all animal tissues contain this substance; but many of the vegetable principles contain nitrogen, and all the young organs of a plant are provided with it. This fact indicates that we should restore to the earth the principle which plants are constantly drawing from it, and that the rational method of manuring is, if I may use the expression, the incorporation of nitrogen with the soil. But I shall return to this important subject when treating of manures. In my next lecture I shall discuss fully the question of the preservation of timber.

OBSERVATIONS

ON A

SIMULATED CASE OF LARYNGISMUS STRIDULUS.

By EDWARD OCTAVIUS HOCKEN, M.D., M.R.C.S.,
Fellow of the Royal Medical and Chirurgical Society,
Member of the Prov. Med. and Surg. Assoc., &c.

An infant, nine weeks old, was brought to me on the 18th of September, 1842, with general convulsions, which had come on the evening before, and had recurred several times during the night. The child was relaxed in its bowels, the stools resembled chopped spinach, and each evacuation was attended by much griping.

About a week previously the parents had shown me the same infant, whilst attending its elder sister informing me that the child had always been healthy since its birth, till a few days before, when it seemed slightly indisposed. There was a slight eruption of strophulus intertinctus on the skin, and a swelling, about the size of a small marble, below the mastoid process on the right side. This swelling had a firm feel, similar to that of an enlarged gland, the skin over it was perfectly unadherent, and of its natural color, and the tumor (of whatever nature it was) was movable. It had come on, they said, or at least they had not observed it, till very recently. Although the child had been in good health, still the mother informed me that every time it took the breast it threw itself backwards, and seemed nearly suffocated, and that she had noticed this ever since it was born. I gave some doubtful diagnosis about the tumor, and merely ordered some gentle aperient.

The elder sister, about fifteen months old, I had been attending for lichen febrilis, which had disappeared very favorably, and she had been considered well for several days. On the Sunday (the 18th) I was informed that on the Friday previous, this child was, to all appearance, as well as ever it was in its life, when in the evening it was seized with a fit of suffocation, followed by very severe convulsions; that these subsided after a short time, but recurred again and again,

and that about two in the morning it had died during one of these attacks. No medical advice had been obtained, as they were unwilling to seek it during the night, having no idea that the following day would be too late.

On the Saturday morning the infant was attacked by the bowel complaint (as the mother thought, from her milk disagreeing with it, after her alarm and grief), and on the Saturday evening with spasmodic inspiration, followed by general convulsions, which recurred, but not very severely, during the night. I saw it on the Sunday, when the diarrhoea and green stools especially attracted my attention, and trusted that the disturbed state of the abdominal ganglionic system was the sole cause and origin of the symptoms. The abdomen was soft, and by no means tender; the mouth and tongue covered with a slimy fur; the skin cool and soft; no heat of head, or drowsiness; lungs perfectly healthy. I ordered mercury with chalk, scammony, and jalap, two grains of each to be taken directly, and repeated every six hours.

Evening: Remains the same; convulsions have recurred.

September 19. Has had several convulsions during the night; breathing occasionally very spasmodic and crowing; seems incapable of swallowing anything; pulse 140; pupils contracted and quite immovable; evident blindness; bowels less frequently relaxed, but still of the same color. I ordered a leech to the temple, a grain of calomel every third hour to the sixth dose, and cold applications to the head, which was to-day hotter than natural, and the face flushed.

Evening: Decidedly improved; had slept quietly for a short time; convulsions had been less severe.

20. The child had recovered its sight, but had been frequently and severely convulsed. There had been several attacks of croupy breathing, which once or twice had even threatened suffocation. The child still continued unable to swallow anything in quantity, but the mouth was kept moistened by a little of its mother's milk. Stools less frequent, but resembled chopped spinach. Thinking that the calomel might now itself be proving an irritant to the abdominal secretions, I entirely omitted it, and directed gentle aperient doses of medicine. I now again examined the tumor in the child's neck, but could detect no difference; it felt quite firm and solid, and was very movable, and seemed to occasion the child some uneasiness when much handled. It occurred to me that probably it extended deeply, and might exert pressure on some important parts, and hence, in connection with the abdominal disturbance, might account for the spasmodic inspiration.

Evening: Secretions from the bowels unchanged; no alteration in the symptoms.

21. I found the child respiring with a very peculiar spasmodic noise, especially marked in the expirations, which seemed to terminate in on short crowing cough. The parents informed me that this had come on some hours before, and had scarcely ceased for a minute since. The lungs were perfectly free from any morbid sound, although the character of the respiration rendered auscultation somewhat difficult. The peculiar appearance of the stools remained precisely the same, although the griping had entirely ceased. The child seemed perfectly conscious; its skin was comfortable,

and it directed its eyes about as if it saw, although the pupils did not move by alternation of light and shade, nor did it wink when the finger was brought close to its lids. I directed a mustard cataplasm to the upper part of the chest, and the *vin. ipecac.*, in doses of twenty minims every hour; feet, as usual, to be placed in hot water.

Evening: The breathing was somewhat relieved; convulsions at intervals. The *ipecacuanha* acted on the bowels, but did not vomit the child.

22. Spasmodic expiration and cough had returned as bad as ever, and occasionally threatened suffocation, and the attacks of convulsions were frequent. The motions were improved, but still of a green color. They found much difficulty in making the infant swallow the *ipecacuanha* mixture, and requested me to return to the powders. I directed that the mother's milk, in small quantities, should be administered by enema, a grain of calomel occasionally given, and a blister be placed to the back of the neck.

23. Spasmodic respiration constant, but aggravated in paroxysms; constant restlessness and complete insomnia; countenance pale; pulse feeble; much reduced in strength. I directed the mouth to be frequently moistened by weak white wine whey, and one fourth of a drop of the tincture of opium to be given every four hours.

24. Still sinking; much quieter since taking the laudanum, and has slept quietly for two or three hours; breathing spasmodic, occasionally quiet; occasional recurrence of convulsions, but less violent than before; no change in the tumor; evacuations green.

25. Sinking fast; occasional attacks of convulsions and spasmodic breathing. Died at four o'clock, a.m., Monday morning.

Post-mortem Examination Eight Hours after Death.

The child was well formed and moderately plump, and the tumor had the same appearance as during life. The contents of the chest were perfectly healthy; lungs free from congestion or inflammation; thymus gland of small size.

Abdomen.—The whole tract of the intestinal canal was distended by air, but empty, with the exception of the cecum, of feculent matters; rectum filled with milk. The bladder was full of urine. Liver healthy; gall-bladder full of bile of a grass-green color; mesenteric glands perfectly healthy.

Cranium.—The contents of the cranium appeared perfectly healthy, although the vessels were rather fuller than ordinary. A few drachms of fluid in the ventricles.

Neck.—On making a careful dissection of the neck, we found the larynx and pharynx pushed forwards by something behind them; they were both of them quite healthy in appearance, except that the lower part of the epiglottis and the cavity of the glottis itself appeared redder than the mucous membrane lining the larynx, from fine vascular injection; but there was no oedema, or other obstruction of the rima. The tumor behind the pharynx was of considerable size, and very firm in feel; it sent a process behind the sterno-cleido-mastoides, just below the mastoid process on the right side, which had the same firm feel. On cutting into its structure it felt like cartilage under the knife, and presented a cyst of considerable thickness, from which a quantity of laudable pus immediately escaped.

When the cyst was completely emptied, it could not have been much less than an ounce of pus which escaped. The cyst was in contact with the front of the bodies of the cervical vertebrae, and the process, noticed during life, turned over the transverse processes.

REMARKS.

During the progress of disease in this infant the parents, almost from the very beginning, despaired of its life, from the similarity of the complaint, as they supposed, to that of the elder little girl. They were anxious that a post-mortem examination should be made, in order to detect the cause of what they considered a family peculiarity; hence they were somewhat surprised at the result of the examination. Not having seen the elder child's symptoms, nor having made an examination of its body subsequently, I cannot, of course, tell what was the nature of its disease, except from the account furnished by the parents. The history of the diseases in both were, however, sufficiently different.

If we review the history of the youngest child's case, we shall find that it presented different symptoms at different periods; sometimes closely resembling spasm of the glottis (*laryngismus stridulus*), then the symptoms were chiefly cerebral, and then a permanent state of irritation of the glottis; marked, however, throughout by constant obstruction in the pharynx. No doubt the tumor interfered greatly with the functions of the sympathetic and other nerves of the neck, and may thus have produced the blindness, &c., although this is less probable from its disappearing and then reappearing subsequently. There can, I think, be little doubt of the abscess being congenital, although it may have increased in size subsequently, as the mother had noticed the child's choking on sucking ever since its birth; the account of the sudden appearance of the external swelling, especially when we take into consideration the character of its cyst, is not very probable. During life there was nothing to lead to a knowledge of the existence of an abscess; there was no indisposition till a few days before its final illness; there was no symptom referable to the pharynx or larynx before abdominal disturbance was superadded; the tumor below the mastoid process was firm, elastic, without any sign of fluctuation, like a glandular enlargement; the only phenomenon previous to the infant's final illness indicating any peculiarity was the difficulty and choking it always experienced from sucking its mother's breast; in short, the symptoms were peculiar, and, although I could not form a positive diagnosis of the nature of the tumor or its extent, I suspected that its presence was intimately connected with the difficulty of breathing and swallowing.

A somewhat similar case to the above was detailed by Mr. Worthington in the "Provincial Medical Journal," * for September 24.

The infant was nine months old. It had been indisposed for five days with slight fever, hoarseness, and crying, before this gentleman saw it. It died in four days from the time he was consulted, with symptoms which he mistook for croup. In his case an encysted abscess was discovered, situated between

the cervical vertebræ and pharynx, extending some way down behind the œsophagus. The cyst was about the size of pullet's egg, capable of containing at least an ounce of pus, and seemed only prevented from forcing its way into the pharynx by a thin partition wall.

In the example I have given, if a diagnosis of abscess could have been made during life, it might readily have been opened at that portion which extended behind the sterno-cleido-mastoideus, or, in Mr. Worthington's, through the pharynx; but the question arises, how is a diagnosis, under such circumstances, to be formed? In the generality of cases I should presume it to be impossible, especially if the cyst proved, as in the present example, thick, firm, and cartilaginous. In some, however, if peculiar symptoms of spasm were referable to the glottis with permanent dysphagia, it would be the duty of the practitioner to pass his finger back into the pharynx, and feel if there were any fluctuation or swelling, and if detectable, an abscess might be surmised, and an instrument passed through the posterior wall of this bag. The occurrence of such cases should be generally known, that if practitioners met with similar cases they might be alive to the possibility of the symptoms depending on deep-seated and concealed accumulations of pus, and it is in the hope of such an use, should any of my readers be so unfortunate as to meet with similar cases, that I now commit this history to paper.

15, Southampton-street, Covent-Garden.

ON

MILD MERCURIAL FRICTION

IN

CERTAIN STATES OF VENEREAL DISEASE.

By JONATHAN TOOGOOD, Esq.,

Senior Surgeon to the Bridgwater Infirmary.

It is a common practice with persons in a certain class of life to apply to quacks and irregular practitioners for the cure of venereal disease, which often subjects them to a complicated set of symptoms, extremely difficult to eradicate. If the patient has been quickly salivated, and is of a scrofulous habit, the difficulty is much increased. In these cases I have found the slow and cautious introduction of mercury by friction a more effectual mode of removing the train of distressing symptoms which follow a mis-treated case, than any other plan of treatment. The following cases will be found worth attention:—

CASE I.—Peter F. contracted a chancre, for which he was very quickly salivated; the sore healed, but after a short time secondary symptoms appeared. He still pursued an irregular course of life, and after the lapse of a year and a half he consulted me. At that time he had nodes in various parts of the body, and was extremely weak and emaciated. A medical friend of great experience, who had for many years been attached to a large hospital, being on a visit at that time, saw him with me, and agreed that a regular mercurial course would afford him the best chance of relief. He did not, however, regularly pursue the plan, and afterwards he took the muriate of lime with some good effect. I then lost sight of him for several years, when I was again desired to visit him. His

state had become deplorable; exfoliations of bone had taken place in various parts of the skull, arms, and legs. He was lying in bed with his knees permanently bent to an acute angle; the abdomen was greatly distended, partly with fluid, and partly tympanitic. All hopes of cure had long since been abandoned, and he sought some mitigation of his sufferings from large doses of opium. Ten grains of mercurial ointment were carefully and slowly rubbed into the thighs every night, and five drops of Fowler's arsenical solution given three times a-day. The good effects of this treatment were soon apparent; in ten days the abdomen was reduced in size five inches by measurement, and by a steady perseverance in this plan for six weeks, with a milk diet, all the wounds healed, the swelling of the abdomen completely subsided, the legs became straight, and he so perfectly recovered that he shortly afterwards married, and never had any return of his former symptoms.

CASE II.—A medical man was attacked with sore throat, which had resisted all the ordinary methods of cure, and affected his constitution considerably. It had continued many weeks when I was consulted, and he was suffering much pain, with loss of appetite and sleep. He fancied he had swallowed a pin, which was still sticking in his throat, and keeping up the irritation. A careful inspection of the parts convinced me that the sore had all the characteristics of a venereal ulcer; but he was equally positive that it could not have arisen from such a cause, not having had the slightest symptom of the disease for fifteen years, since which time he had been married, and had several healthy children. He was, however, prevailed on to take small doses of oxymuriate of mercury in sarsaparilla, which at first appeared to do good, but after a short time the disease became worse. He consulted many friends, whose opinions were as various as the treatment recommended. As he got worse and worse every week, he undertook a journey to London, which he accomplished with difficulty by easy stages, his strength had become so much impaired. He consulted several surgeons of great eminence and experience, all of whom agreed in opinion as to the nature of the disease, although they differed in their mode of treatment. One ordered a regular course of mercury in the usual way; another, the daily application of lunar caustic to the sore and surrounding parts, with the use of tonics; a third, the fumigation of the throat with cinnabar; and a fourth, who stood deservedly at the head of the profession, assured him that his cure would be effected by Veleno's vegetable syrup. All these remedies successively failed, and at length he abandoned himself to despair, and resolved to return home and die. I earnestly entreated him to try the plan of rubbing in very small quantities of mercurial ointment, which at length he reluctantly consented to, and in one week he derived such sensible benefit from its use that he was encouraged to persevere. The pains gradually abated, and he got sleep; the sore healed, his appetite and strength returned, and in less than six weeks he was able to resume his practice. His recovery was delayed by the exfoliation of the bones of the nose, but ultimately the cure was so perfect that he has been enabled to follow his profession as a country surgeon, and been in the enjoyment of good health.

CASE III.—I was consulted by a gentleman who had been suffering for some time from a sore throat of undefined character, but whose health in other respects did not appear to be much impaired; but having lost two brothers, in both of whom an affection of the throat was one of the earliest symptoms of disease, which ultimately terminated in consumption, his friends became greatly alarmed for the event. I did not see either of the former cases, but I understood that although they commenced with sore throat the disease did not differ from ordinary consumption. An accurate investigation of all the circumstances induced a suspicion in my mind that there existed some venereal taint, which was strengthened by observing a hard tuberculated swelling about the size of a small pea on the penis. On questioning my patient closely on this point, he assured me that he never had any venereal sore in his life, but admitted that four years before he had contracted a slight complaint which was pronounced not to be venereal, which speedily got well under simple treatment, and that he had never had the slightest symptom of disease since. I recommended the same plan of very mild mercurial friction, which had been so successful in other cases, as the only probable means of cure. To this, however, both the patient and his friends objected, partly on account of his being of a scrofulous habit, but chiefly in consequence of the deliberate opinions of two deservedly eminent surgeons, who had stated that such a course would in all probability be fatal. So confidently, however, did I anticipate a different result, that I urged him to adopt the plan, and by steadily persevering in it for six weeks he was completely restored to health, and several years have since elapsed, during which he has never experienced the slightest return of his former complaint.

I have witnessed several similar cases in which the practice has been adopted with the same success.

Bridgewater, Oct. 1842.

EPILEPSY FROM PROTRACTED LACTATION.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you think the subjoined case of epilepsy, resulting from protracted suckling, of sufficient importance, I shall feel obliged by your insertion of it in your Journal. It is by far the most protracted instance which I have witnessed, and, so far as I remember, I have never seen any case recorded where lactation was continued for such an unwarrantable length of time.

Your obedient servant,

JAMES ORWIN,

Surgeon to the Worcester Ophthalmic Institution.

Worcester, Sept. 29, 1842.

Mrs. W., aged twenty-seven, was confined in September, 1838, of a daughter; her health had been previously good, and she recovered favorably after her confinement. She continued to suckle the child for a period of about three years and a quarter, when I was requested to see her, and found her suffering from the following symptoms.—extreme debility with loss of appetite, so that she had not the least inclina-

tion for food; tongue coated; bowels rather relaxed; pulse quick and feeble, with severe and frequent pain in the head; for the last four or five months she had had an almost constant sanguineous secretion from the uterus, and before this appeared she had had a copious leucorrhœal discharge. About a fortnight before I saw her she had an attack of epilepsy, and experienced several returns of the fits.

As I considered the protracted lactation to be the principal if not the sole cause of the symptoms under which she was suffering, I desired that the child might be immediately weaned; but I experienced considerable difficulty in inducing the mother to consent to this. However, after much persuasion, she at length yielded. I ordered six leeches to be applied to the head, and prescribed small doses of blue pill with extract of hyosciamus, to be taken twice a-day. She had two or three attacks of epilepsy after she came under my care, but they were not so violent as before she discontinued suckling.

The pain in the head having subsided, I prescribed the following mixture:—

Citrate of iron, one drachm;

Water, six ounces. Two tablespoonfuls to be taken thrice a-day.

She began to improve under this treatment, in conjunction with a nutritious diet, and her appetite and strength slowly returned. She subsequently went into the country, where she remained a few weeks; she returned quite well, and has continued so up to the present time.

DIAGNOSIS OF CHOLERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In the observations "On the Diagnosis of Indian and English Cholera," which Mr. Salter, of Poole, has so ably addressed to you, I perceive that he refers to two cases of the malignant form related by me in some late numbers of the "Provincial Medical Journal," and appears to entertain some little doubt as to the correctness of the diagnosis, merely, I presume, from the reason, that cases of a similar nature had not occurred in this town, or fallen under his observation during the prevalence of the late epidemic. Now I am not at all anxious to enter into a controversy on the characteristic symptoms of Indian and English cholera, but beg to say, from all I have ever read, heard, or seen, of English cholera, that it is seldom or ever attended with such violent and distressing symptoms as occurred in the two cases I thought proper to relate, and which did not leave the least shadow of doubt in my own mind as to the true nature of the disease. In conversation with a highly respectable and talented practitioner of a neighbouring town only a few days ago, I learned from him that he had met with two or three cases of cholera, one of which had terminated fatally during the consecutive fever and another in the state of collapse before he could arrive at the house. I also observed in the "Lancet," of September 10, three other cases, by Mr. Edwards, of Lansaintfrairs, Montgomeryshire, who says, "Having noticed in the 'Provincial Medical Journal' the report of a case of malignant cholera, attended by Mr. West, of Poole,

I beg to call your attention to the fact, that three cases of cholera have occurred in my neighbourhood, which is an agricultural district on the borders of England, and remarkable for the general healthiness of its population." Being, therefore, corroborated by the practice of other medical men, that such cases have occurred in extremely healthy situations during the prevalence of the late epidemic as well as in Poole, I trust your readers will still place faith on the truth of my assertions, and acquit me of an attempt to publish that which is incorrect.

Yours obediently,

JOHN WICKENS WEST, M.R.C.S.L.

Poole, October 10, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, OCTOBER 15, 1842.

To every rational and well-disposed person nothing could be more convincing, nothing could more clearly establish, not only the inefficacy, but the absolute danger of the water system, when *exclusively* applied, than the case published by Dr. Hastings in the "Provincial Medical Journal" a few weeks ago. And yet it is to be feared that the perusal of it will have but little beneficial effect upon the mind of the public in general. There is, to the unprofessional reader, too much novelty about the system which it exposes, to receive, as yet, any permanent check from the details of a case, however good may be its authority, however honorable the source from which it springs. No, there are two things wanted before hydropathy will be deemed a byword in this country. The one is time, to wear away its apparent novelty; the other is the introduction of a fresh system, which will urge its claims to our support, from bringing with it that never-failing charm which the one we are now permitting to sink into oblivion has lost, and from the unheard-of, wonders which its champions will promise to perform. It is not that we wish to speak disparagingly of water, or doubt its efficacy as a remedial agent, when judiciously and cautiously applied. It is its adoption, to the exclusion of all other remedies, which we find fault with and condemn.

To one of the most salubrious and delightful spots in England—the village of Malvern—has lately repaired one of the advocates of the water system, where he conducts an establishment upon the same plan as that of Priessnitz, in Germany; and, attracted by the reports of wonderful cures, thither flock "the halt, the maimed, and the blind." The same assurances of success are alike held out to all—to the gouty and well-fed alderman—to the poor, wan, and dejected creature, rapidly sinking beneath the strides of consumption—to the little infant, "mewling and puking in the nurse's arms"—to him who has attained "second childishness and mere oblivion"—to the un-

fortunate being who has never heard from his birth the sweet and varied sounds of nature, or whose heart has never been gladdened by the blessed light of day.

That this water doctor performs many cures, we do not for a moment doubt. But, on the other hand, we do not hesitate to affirm that the wholesale adoption of this remedy in indiscriminate cases has and will continue to be productive of the most serious and extensive mischief. And, in the first place, if we look to the instances in which hydropathy makes its most frequent cures, they will be found to be old chronic cases, for which the medical man previously in attendance recommended strong exercise, fresh air, bathing, nourishing and wholesome diet, with entire abstinence from all beverages of an exciting or inflammatory nature. But, the fact is, a physician finds it a very difficult thing to get his patients to do this. It causes too much trouble or expense, and they think that, in all probability, they shall recover without the adoption of such rigorous measures. The disease, however, is of a nature which will not admit of this; and so, if they do not get worse, at least they make no advances towards recovery. Then they hear of the *wonderful cures* of the water doctor, and away they go to his establishment. Here they are compelled to do that which was before recommended, for it is part of the system which builds its success solely upon a rigorous application. They rise early, walk the Malvern hills before breakfast, returned home with the skin in a warm, healthy glow, eat sparingly, and drink nothing but water. Can anything be more beneficial than this to a person who has been a martyr to the gout, or to one who, from imprudence and intemperance, is frequently suffering from indigestion? Certainly not. But from its efficacy in one class of diseases is not to be assumed its efficacy in all. Can this same treatment be adopted in fever or consumption, where, perhaps, the patient's malady is increased by the slightest exposure to cold, or his sufferings aggravated by the least exertion? Perhaps the advocates of the water system will reply in the affirmative, and say that Priessnitz has published cases of people in a confirmed consumption having recovered from this dreadful disease by the adoption of the binding and undeviating system, which he imposes equally on all who may consult him. We answer, that the fact of Priessnitz having published these cases, is no proof at all of their ever having occurred. That he thought them consumptive cases, we are willing to allow; but that they really were so, we have reason to disbelieve. Is the narrator of those cases fully qualified to judge of medical facts, their accuracy, and their relations? It is one thing, be it remembered, for a man who has received no professional education whatever, to assert that his patient is suffering from a violent cough; but it is quite another

thing to affirm that that cough depends upon tubercular depositions in the lungs. And it is a consideration of no small importance (alas! the credulity of the present day proves how much it is overlooked) to him who, in the true spirit of philosophical inquiry, would seek after knowledge, that he should ever be cautious how he receives facts on the testimony of persons whose opportunities of acquiring correct information, or whose powers of accurate and impartial observation he may have reason to doubt.

It is for this reason, then, and this reason only, that when Priessnitz, and many other water doctors (most of whom, like himself, have received no medical education), tell us of the wonderful cures they have effected in every kind of disease, and some of them diseases which the skill of man has rarely if ever been able to overcome, we turn a deaf ear to their fallacious assertions, and urge our unwillingness "to receive as facts statements which are not facts, but merely opinions or general assumptions."

But whilst we admit that, in many cases, the system of hydropathy may be practised with well-marked beneficial results, we must also mention that facts are not wanting to prove its inefficacy—that numberless cases are to be found where incalculable mischief has been entailed upon the unfortunate patient for life, and others where, had not the timely assistance of a judicious practitioner been secured, death would inevitably have followed. The case published by Dr. Hastings fully establishes this; and we will briefly allude to three others which have been communicated to us by a correspondent.

The first case is that of a poor man residing in the neighbourhood of Malvern. He was seized a short time since with a severe attack of rheumatic fever, for which he applied to the water doctor. By his advice he was submitted to the usual process; first he was wrapped up in numberless blankets, and then a large bed was thrown over him; profuse sweating having been produced, he was removed into a cold bath, and desired to drink as much water as he could swallow; afterwards he put on his clothes, and took some violent exercise. He felt rather better for the next day, but then, getting worse, he again applied to the same source as before, when he was informed that his was not a proper case for the hydropathic system, and that the sooner he sought advice elsewhere the better.

The second case is that of a laborer residing close to Malvern, who, about six weeks ago, feeling rather poorly, with headache and slight feverishness, applied to the water doctor. He was submitted to a process similar to the former, with the addition of wet towels round the loins, which he was compelled to wear for three or four days, when, finding them extremely cold and unpleasant, he gave them up. In a few days, pains in the back and loins ensued, and he has now a large psoas abscess pointing in the right groin.

The third case is that of a lady residing in Worcester, who has been very deaf from birth. She applied to the water doctor. He said, if he could not promise a cure, he would at least ensure considerable relief; she submitted to a system similar to that adopted in the two foregoing cases; wet bandages were applied round the loins, from which she took a violent cold. She remained in the establishment for three weeks, when, finding that the expense incurred was by no means compensated for by the relief obtained, she returned home.

It were unnecessary to make any remarks or comments upon these cases. Here they are—these out of very many which we know for certain are daily occurring. But, unfortunately for the public, the unsuccessful ones are not trumpeted forth to the world like the more successful ones. They are hushed up, or sent to seek elsewhere for that remedy which they could not obtain in Malvern. The object, it will be perceived, of these remarks, is not to cry down unsparingly the water system. As an exclusive system we cannot, indeed, think highly of it, but at the same time we are not disposed to undervalue it. Its efficacy in many cases no medical man can doubt; the danger of it in many cases no rational being can deny. It is its adoption, we repeat, to the exclusion of all other remedies, which we chiefly deprecate and condemn; and while, perhaps, we witness the strides which its advocates are now making with the weak and credulous, we rejoice to think that, ere long—like all systems of a similar nature, which are alone content to build their foundations upon the wrecks of others, and to make their unstable way with those whose love of novelty is greater than their love of that which is solid and good—it will be no more. The success attending it will be found to fall far short of the promises and assurances which have been given; and as, but a few months ago, the homœopathic glories were eclipsed by the more startling ones of hydropathy, so will the overwhelming torrents which the advocates of the latter are now letting loose upon the world be stayed by the march of a more triumphant and wonderworking system.

ACADEMY OF SCIENCES, PARIS.

October 3, 1842.

INSANITY—SIZE OF THE HEAD AND BRAIN.

By M. Parchappe, Physician to the Lunatic Asylum of Rouen.

To ascertain how far the development of the intellectual faculties may be influenced by the size of the brain, the author has examined a great many individuals and subjects with great care, first measuring the head in the living subject, and then measuring the head and weighing the brain of the same individual when dead; he likewise noted every circumstance of sex, age, stature, health, intellect, &c., which was likely to throw any light on the subject. The facts observed by the author amount to 344; or 169

heads measured, 58 skulls measured, 22 skulls gauged, 95 brains weighed.

The principal conclusions drawn from these facts, considered in every point of view connected with size (the influence of form being reserved), are—

SIZE OF HEAD.—The size of the head is much smaller in the female than in the male, not only *en masse*, but in all the separate diameters. The weight of the cranium also is less in the female.

Age.—The volume of the head does not seem to be limited by the period at which the general growth of the body ceases; the head appears to enlarge gradually up to the age of 60 years. The increase of size shows itself almost exclusively in the horizontal circular development of the head, and depends chiefly on enlargement of the frontal sinuses. After 60 years of age the size of the head diminishes; the weight of the skull also diminishes in old age.

Stature.—In tall men the head is larger than in small persons.

Idioty.—The head is much smaller in born idiots and fools than in persons of natural mental powers.

Development of Intelligence.—The intelligence bears no proportion to the size of the head in fools and idiots. But on comparing the average of size of 10 heads of men of superior intellect with that of 10 heads of persons whose faculties were below par, the advantage was clearly on the side of the former. In men a *certain* size of head is necessary for a proper development of the intellect, but beyond this we find no necessary connection between the volume of the head and the development of the intellect.

Race.—The Caucasian race is superior to all others with respect to the length of the head and the size of the frontal and occipital regions. The most powerful causes which influence the size of the head are sex, race, stature, and idioty; the development of the intellect is the least influential.

MEAN SIZE OF HEAD IN BOTH SEXES.

In 22 men and 18 women; intelligence normal; age 30 to 50 for men; 25 to 50 for females.

		Males.	Females.
Antero-posterior diameter		186.8	174.5
Lateral		142.2	136.2
Vertical	Antero-posterior curve	347.5	340.5
	Lateral curve	356.7	340.5
Horizontal	Anterior curve	301.8	288.2
	Posterior curve	277.8	249.5
		1612.8	1529.4

SIZE OF BRAIN.—**Sex.**—The comparative weight of the brain, in 94 persons of both sexes, gave an average in favour of the male; the capacity of the cranium, measured in 30 skulls belonging to both sexes, was also less in the female.

Age.—The author's observations lead him to conclude that the brain continues to increase up to the age of 40; it remains stationary to 70, and then begins to decline.

Stature.—In both sexes the weight of the brain is evidently in relation to the stature.

MEAN WEIGHT OF BRAIN. (From 30 to 60 years.)—

	Brain.	Cerebrum.	Cerebellum.	Med. Ob.
Males, 13.	1.352 kilog.*	1.175	.160	.15
Females, 9	1.229 „	1.062	.133	.13

* The kilogramme is equivalent to 2.205 pounds avoirdupoise.

RELATION BETWEEN THE SIZE OF THE HEAD AND THAT OF THE BRAIN.—As the thickness of the occipital bone is subject to much variation, and the size of the frontal sinuses cannot be determined, it is impossible to arrive at any exact relation between the volume of the head and the form or weight of the brain.

DISEASE OF THE BRAIN IN INSANITY.—There is no cerebral disease which can be regarded as the essential lesion of insanity; the following are those most frequently found:—Echymosis under the arachnoid and pointed injection of a part of the cortical surface, with or without softening; extensive softening of the middle portion of the cortical substance; adherence of the pia mater to the brain; rosy, lilac, or purple color of the cortical substance; atrophy of the convolutions; induration of the brain.

ON INJECTIONS INTO SEROUS CAVITIES.

By M. Velpeau.

For some time back the author has devoted his attention to the effects of injections into different serous cavities; a few of the results he now mentions. He makes a small puncture into the cavity and injects a solution of iodine; in this way has effected a cure in cases of serous cysts, sanguineous cysts, and colloid cysts in almost every region of the body. Bronchocele often consists in cysts filled with a serous or dark fluid; in five cases of this kind the author tried the iodine injections, and was completely successful. In dropsy of the articular cavities the operation would seem to be more dangerous. M. Velpeau tried this plan in two cases; one was cured, but in the other case it did not succeed; but he has recently employed a more simple mode of operating in cases of hydrarthrosis, and the results lead him to hope that it will be as easy to cure this disease as hydrocele with iodine injections.

SHEFFIELD MEDICAL SOCIETY.

October 6, 1842.

The first meeting of the Sheffield Medical Society was held on Thursday, October 6, for the appointment of officers and the arrangement of business for the ensuing session.

Mr. Overend was elected president, and Messrs. Wright and Law secretaries, for the session.

At the close of the business Mr. Thomas exhibited a fatty tumor, weighing rather more than a pound and a half, which he had removed that morning from the back of a patient in the infirmary, together with a cast taken previous to the operation. The tumor had been eleven years in its growth; had never caused pain, but had become inconvenient from its bulk, which prevented the free action of the scapula.

Mr. W. Jackson invited some of the members to see a case of hydrophobia at that time under his care. The patient, a man, aged seventy, had been bitten by a dog supposed to be rabid seven weeks before. From the short account given, it appeared as if there were some anomalous symptoms; but it is hoped that the case in full will be brought before the society. The patient died the next day.

BIRMINGHAM PATHOLOGICAL SOCIETY.

September 3, 1842.

JAMES JOHNSTONE, Esq., in the Chair.

MALFORMATION OF THE HEART.

Dr. Fletcher brought before the society two preparations of malformations of the heart, which had formed the subject of a paper that had been read before the Royal Medico-Chirurgical Society of London, and was about to be published in the forthcoming volume of their Transactions; but as the council had determined to publish a plate of the preparation of the heart and vessels of Mary Bunn only, Dr. Fletcher was anxious to exhibit the preparation of the heart of George Ollet to the members of the society; and, thinking it would render the paper more interesting to them to have seen the preparations, he therefore exhibited them both, directed attention to their several points of interest, and referred to the paper about to appear in the volume, now in the press, of the Transactions of the Medico-Chirurgical Society, for more lengthened details of the cases.

FUNGOID DISEASE OF TIBIA.

Mr. Alfred Baker then exhibited to the society a specimen of fungoid disease of the medullary membrane of the head of the tibia, and read the following case:—

John Epsley, aged thirty-three, an excavator, was received into the Birmingham General Hospital on the 14th of July, 1841. He states that his health has been always good, with the exception of slight rheumatic pains in the legs, until last March, when he worked for an hour or so up to his knees in water, and did not change his clothes afterwards. In the after part of the same day he was attacked with rigors, succeeded by fever, which confined him to bed for a week. In another fortnight he was convalescent, and resumed his employment, but observed a weakness in the right leg, unattended by pain or discoloration, and considerable swelling of the limb up to the ham, coming on at night. The weakness increased; he felt inability to move the limb, which became the seat of constant dull aching pain, running down the tibial spine, and becoming more severe towards night and after exertion. He, however, continued to work, and fifteen days ago, whilst stepping from a boat upon the towing-path, fell, and, on attempting to rise, found that his right leg was incapable of supporting him. He was seen by a surgeon, who declared his leg to be fractured. The inflammation which succeeded the accident was met by active local depletion and fomentations, and precluded the application of splints. Being at some distance from the surgeon, it was thought advisable to remove him to Birmingham, in order to procure for him the requisite attention and care. When admitted was in moderate health and flesh, but had a sallow complexion and anxious expression of countenance. The leg was in good position, and a small, firm swelling was observed on the inner part, some three or four inches below the knee-joint; its surface was smooth, of natural color, and free from heat and tenderness, and he complained of some pain in this part. No attempt was made to produce crepitus, but the limb was placed upon the double-inclined plane, and the ordinary diet of the house prescribed. In a fortnight after his admission, the

swelling mentioned became larger, redder, acquired heat, and was exceedingly painful. Its firmness was at the same time diminished, and it shortly became so soft as to lead to its puncture. No fluid escaped, and the edges of the incision exhibited no disposition to heal. After the lapse of three weeks more, the tumor enlarged, separating the lips of the wound, and protruding between them a soft greyish structure. The soft parts around it now became tense, shining, and erythematous, and a scanty ichor issued from the wound. His general health also participated in the disturbance, and he had fever, rapid circulation, occasional sweats, and prostration. The wound was now enlarged upwards and downwards; a small quantity of bloody pus, liberated by the free division of the periosteum, and a mass of soft, greyish, vascular looking fungus displayed, at the bottom of which the bone, denuded, roughened, and somewhat spicular, might be felt. Poultices, ammonia, and wine were resorted to.

A superficial slough was thrown off in the course of a few days, after which the fungoid growth enlarged, projected from the opening, formed a globular mass as large as an orange, and overlapped the edges of the transmitting aperture like a large mushroom, a scanty sanies constantly escaped from it, and occasionally it poured out blood. As the disease was on the advance, and his health yielding under its influence, it was determined to resort to amputation, which was performed on the 4th of September. At the time of operation, it was observed that the femoral artery had not its usual elasticity, its coats seemed thick, and the crackling indicative of complete division of its inner coat was not distinct. The femur also was unusually dense and resisting.

Examination of Limb after Removal.

The femur and fibula presented no enlargement or unhealthy appearance, and the structures entering into the composition of the knee-joint were free from disease. The morbid growth had not only extended through the divided periosteum on the inner surface of the tibia, but had also taken an outward direction towards the fibula, and a backward course into the ham, beneath the extensor digitorum communis and tibialis anticus externally, and the popliteus muscle posteriorly. These muscles were stretched by it, and although the periosteum beneath them was entire, they seemed to have undergone some change, being soft, pale, and brownish.

The disease then was limited to the tibia, which was cut vertically by the saw. The upper third of the bone was found to be almost entirely changed in structure. The cancellated and cellular arrangement of the interior was for some distance completely destroyed, and its place occupied by a soft, red, vascular looking fungus, in the midst of which lay imbedded the two fragments of the tibia, which had sustained a transverse fracture without displacement. Around this growth the cancelli were yet visible, though imperfect and somewhat broken; whilst, as we receded from it, the texture of the bone became more healthy. The cells in the upper part of the tibia, just beneath the articular surface, were denser than natural from compression, and had a yellowish tinge, but whether this arose from condensation of the natural secretion or from morbid deposit was not quite clear. Though

the interior of the tibia was thus broken down, so as to circumscribe in some measure the centre of disease, yet these limits were not accurately defined; for the lining membrane of the cells around was, in parts, discolored, red, and apparently undergoing the process of conversion. The mass, which had protruded through the divided periosteum on the inner surface of the bone, differed in its texture from the growth within, being softer, spongy, filled with small ecchymoses, and resembling placental tissue.

The bone was expanded and its shell attenuated, and the periosteum seemed to be free from disease.

September 8. Has gone on tolerably well; has been delirious most nights, but rational in the day; has had severe startings in the limb, which have disturbed the dressings. The bandages are soaked, and a copious discharge has exuded between them, having the characters of flaky pus suspended in sanguinolent serum; he has very little fever. Upon removing the dressing, the edges of the stump were found to be in apposition, but sloughy, inactive, and non-adherent. One or two ligatures came away.

13. Profuse discharges have occurred daily since last report, all having a sanious look and fetid smell. The stump has been sloughing, and all the ligatures have been thrown off, excepting that on the *main* artery and one applied to a small vessel in its vicinity. The soft tissues have shrunk and retracted; the bone projects; and the patient's health has been sinking; his countenance is pale, sallow, and very anxious; he feels great debility; has profuse perspirations, anorexia and emaciation. To day, whilst dressing the stump, the ligature was suddenly propelled from the femoral artery and followed by a jet of arterial blood, which in an instant amounted to several ounces. Pressure over the artery was maintained for some time, and as the bleeding recurred upon its removal, it was determined to attempt the ligature of the vessel from the wound. The face of the stump was accordingly opened, a tenaculum inserted deeply into the part pulsating, and a thick ligature applied around the vessel and neighbouring muscular structure, after which the edges of the stump were again brought together.

19. The patient has been considerably depressed by the loss of blood; he is apathetic; his skin cool and bedewed with sweat; his pulse soft, 90; his tongue clean and dry; appetite bad and bowels open; he complains of inability to make water, and the hypogastrium is full and tumid. A catheter was introduced, and three pints of high colored and offensive urine drawn off. The stump is cleaner on the surface and disposed to throw out granulations; the discharge is moderate and puriform; its face has been washed for some days past with a weak solution of chloride of lime, for the purpose of removing and correcting the offensive discharges and preventing purulent absorption. The second ligature applied to the main artery came away on the 16th (three days after its application) without any hæmorrhage.

24. Two days since a small slough was discovered on the sacrum, which, though pressure was removed by pillowing, has extended so much as to lead us to-day to turn him upon his right side. The general symptoms are much the same; the retention of urine continues, and the fluid when drawn off is highly

ammoniacal. The stump is improving, the granulations being more active and the discharge more puriform and less abundant. To have decoction of bark and ammonia.

28. Evidently sinking; face expressive of anxiety and pain, but when questioned does not complain. He lies in a state of stupor, muttering indistinctly, and when aroused his voice is tremulous, and his manner hesitating; has profuse perspirations, and constant tremor or twitching of the limbs; his breathing is hurried and irregular; his pulse rapid and small; his lips and teeth are covered with sordes; and his tongue is brown, dry, and cracked; has complete loss of appetite; the urine is coffee colored, and still retained; and his fæces escape involuntarily. He has only lain for four days upon the right side, and a slough has already formed upon the right hip, whilst the arm has become œdematous, and the shoulder is inflamed and threatens sphacelation; the stump exhibits utter want of action, being shrunk, pale, and dry; the sacral slough is unimproved, and sinuses run under the glutei muscles outwards to the hips. He was turned now upon the left side, and had the right arm, which was cold, rolled with flannel.

He died on the 30th, the left arm having become œdematous, and an eschar having formed upon the left hip.

Post-mortem Appearances.

The only ones worthy of note were, first, extensive sinuses burrowing from the sacral slough among the glutei filled with pus; second, a deposit of pus as large as a filbert in the base of the right lung, surrounded by a purplish zone of discoloration; third, a puriform deposit of about an ounce in the cavity of the right hip-joint, the ligamentum teres being unbroken, and the cartilages healthy; fourth, the bone itself was in a state of high disease; its shell or compact tissue was dense, excessively hard and white, almost resembling ivory; a section in its long axis displayed the following appearances:—The portion nearest to the face of the stump had its cancelli broken down, deprived of its medullary membrane, and was of a deep brownish green color; above this the medullary lining of the bone could be traced, but it was not continuous, was soft and dark in its color, whilst the cells were filled with what appeared to be a sanious pus; lastly, towards its upper extremity, the medullary tissue was unbroken, and the cancellated structure of the bone had a blueish green tinge.

This case, Mr. Baker said, was interesting, as exhibiting the insidious commencement and slow progress of disease originating in the osseous tissues. There can be little doubt that the "rheumatic pains," of which the patient first complained, were the earliest indications of its existence. The cold and wet to which he was exposed acted probably as an exciting cause, and hastened its development; for we find that, upon recovery from the short illness thus brought on, he had, in addition to the previous pain down the spine of the tibia, weakness of the limb and swelling towards night, the latter symptom pointing to some tumefaction or other obstruction, perhaps not evident to the senses, by which the current in the deep-seated venous trunks was impeded. That the disease had made some considerable advances before he met with the accident is, in my opinion, proved by the nature and seat of injury;

for the solution of continuity was limited to the tibia, the fibula retaining its integrity, whilst in most cases of fracture of the leg, produced by slipping and consequent falling, if both bones be not broken, the injury usually alights upon the lower third of the fibula. This opinion, moreover, derives additional support from the point at which the tibia was broken—namely, in the upper third where it expands to form the articulating surface—a part abounding in cancellated structure, having less of the dense earthy shell of the long bones, and being consequently less brittle and less liable to suffer from *contre coup* than the shaft.

The delay in the outward manifestation of the disease may be attributed to the small amount of injury inflicted by the fall, and fracture upon the fibrous covering of the bone. The morbid growth, as shown by the specimen, commenced in the medullary membrane, produced by its pressure absorption of the earthy material by which it was encased, and was thus retarded in its course until a separation of the particles of the bone was produced. It now insinuated itself between the edges of the fracture, filled up the spaces caused by the separation of the periosteum from the bone, and distended this membrane, producing the local and general disturbance which preceded the incision. By its division the only obstacle was removed, and an extension of the disease in the form of the fungus which has been described, and which is yet preserved, speedily resulted. Doubt could no longer be entertained as to its nature, and the only remedy, an uncertain one I grant, was immediately applied. The after progress of the case was unfortunate; the profuse and peculiar discharges, the sloughing and ulceration of the stump, the secondary hæmorrhage, and the utter want of nervous energy and healthy reparative action, led to an unfavorable prognosis. He sunk, worn out by hectic, and exhibiting, as far as sloughs can do, the most advanced degree of enervation.

The state of the femur, as witnessed upon examination after death, explains, perhaps, the peculiar characters of the discharges from the stump. The medullary membrane seems to have been disorganised by inflammatory action, modified by the dyscrasia of the individual; and when this is viewed in connection with the puriform deposits in the hip-joint and lung, we may be able to conceive the serious drain which had operated upon a system already enfeebled by chronic disease and loss of blood.

BIRMINGHAM ROYAL SCHOOL OF MEDICINE AND SURGERY.

The patrons and friends of this institution assembled in the lecture-room of the school, on Monday last, to witness the annual distribution of prizes to the students. Dr. Johnstone, the venerable and esteemed president, occupied the chair, and amongst the gentlemen present we observed the Rev. R. Kennedy, the Rev. W. Downes, the Rev. Henry Pixell, the Rev. J. Oldknow, and other clergy; Dr. Male, Dr. James Johnstone, Dr. Annesley, Dr. Melson, Dr. Percy, Dr. Sherett, Dr. Mackay; Mr. Cox, Mr. Wickenden, Mr. Parker, Mr. Berry, Mr. Willcox, and other professional gentlemen of the town and district, many of the guardians of the town, governors and subscribers of the school, and other friends.

Previous to the distribution of the medals and other prizes, Dr. Eccles delivered an introductory address to the students "On the Evidences of wise and benevolent Design exhibited in the Physiology and Pathology of the Human Body."

At the close of Dr. Eccles's address, the Rev. Rann Kennedy rose to present the sixth Jephsonian Prize of £21 to Mr. G. Yates, of Dumbleton, and resident student of the general hospital, for the excellent public examination which he had passed in all branches of medical knowledge, and for diligence, regularity, and good conduct, and made a few appropriate observations respecting the donor and recipient of the prize.

The Venerable President of the School, in awarding to the successful candidates the school prize medals, expressed a hope that the students who had thus distinguished themselves would become eminent in their profession, and in after-life fulfil those expectations of which their present success afforded such ample and cheering promise. Dr. Johnstone next adverted, with much pleasure, to the general good conduct of the whole of the students in the school, not a single complaint having reached the ears of the committee of council, or lecturers, during the session which had just been concluded, and he urged them to continued and increased diligence in their studies, assuring them that in order to qualify themselves for their profession, they would find ample employment for the whole of their time, not only in scientific attainments, but in acquiring those auxiliary branches of knowledge which were necessary to make them accomplished surgeons and physicians. Dr. Johnstone, in conclusion, referred to the efforts which were being made to establish a collegiate institution in connection with the Royal School of Medicine, in which the students would enjoy the comforts of a home and the advantages of parental, moral, and religious superintendence. He mentioned this fact to show that every possible means were being taken to render the school more useful, and to afford the students greater opportunities for acquiring that knowledge which was so essential to their best success in after life. The venerable president then presented the following prizes:—

Anatomy.—First Silver Medal.—Mr. G. Yates, Dumbleton, resident student of the General Hospital.

Materia Medica.—First Silver Medal.—Mr. J. Johnston, Birmingham, student of the Queen's Hospital.—Second Silver Medal.—Mr. John Moore, Moreton-in-Marsh, student of the Queen's Hospital.

Chemistry.—First Silver Medal.—Mr. Mackenzie, Birmingham, student of the Queen's Hospital.—Second Silver Medal.—Mr. John Moore, Moreton-in-Marsh, student of the Queen's Hospital.

Practice of Physic.—First Silver Medal.—Mr. J. Clarkson, Birmingham, Student of the General Hospital.

Practice of Midwifery.—First Silver Medal.—Mr. J. Clarkson, Birmingham, student of the General Hospital.

Botany.—First Silver Medal.—Mr. Payne, Birmingham.

Anatomical Demonstrations.—Book.—Mr. G. Yates, Dumbleton, resident student of the General Hospital.

Dr. Eccles, in the name of the lecturers of the School, next presented the governors' and subscribers' gold medals of five guineas each, awarded to Mr.

John Moore, Moreton-in-Marsh, student of the Queen's Hospital, and to Mr. James Percival Chambers, Wolverhampton, student of the Queen's Hospital, as prizes for diligence, regularity, and good conduct, ascertained by a careful examination of the class books of each lecturer.

HULL SCHOOL OF MEDICINE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I was surprised not to find in your last week's notice of the provincial schools, the least allusion to the Hull and East Riding School of Medicine and Anatomy.* This was also the case in your October number for last year, while schools, in every point of view much inferior to the one at Hull, were favorably spoken of. I then intended to have furnished you with the following brief outline of its history and constitution, which, doubtless, will be interesting information to many of the profession in this neighbourhood and elsewhere, especially as the inadequate support which the school has hitherto met with, as well as the large debt which has been incurred in the erection of a neat, spacious, and commodious building, do not appear to warrant the enterprising proprietors in extensively advertising.

The formation of a medical school in Hull was first suggested by the late eminent Dr. John Alderson—a man zealous for the public good, and ever foremost in the support of everything calculated to aid the advancement of science. Accordingly, in 1831, his highly talented son, Dr. James Alderson, F.R.S., &c., together with Messrs. Craven and Wallis, succeeded in establishing a school, which has hitherto been most ably and efficiently conducted, and has sent forth a number of well-informed and skilful practitioners.

The lectures are, on Practical Medicine, James Alderson, M.D.; four days weekly.

Anatomy and Physiology, Messrs. Craven and Wallis; daily.

Materia Medica and Therapeutics, Henry Cooper, M.B., &c.; five days weekly.

Anatomical Demonstrations, Edward Wallis, Esq.; four days weekly.

Chemistry, Mr. Sollitt; five days weekly.

Midwifery and Diseases of Women and Children, Mr. Robert Hardy; four days weekly.

Surgery, Robert Craven, Esq., senior surgeon to the Hull General Infirmary, &c.

Practical Chemistry, Mr. Sollitt.

Forensic Medicine, Dr. Alderson, physician to the Hull Asylum.

Botany, Mr. David Smith, curator to the Botanical Gardens; three days per week during the summer.

A course on Morbid Anatomy is also annually delivered.

The Midwifery class have the privilege of attending an extensive lying-in charity; and connected with the school is a well-furnished museum of Morbid and Comparative Anatomy.

Clinical Lectures at the General Infirmary are given weekly, on Medical Cases, by the physicians, Drs.

* We were unable to describe the Hull School, having neither seen any advertisement or received any prospectus connected with it.—Eds.

Alderson, Horner, and Sandwith; on Surgical Cases, by Messrs. Craven and Cooper.

The number of beds contained in the hospital is about 180. The building, which is now a magnificent ornament to the town, has lately, at a great outlay, been beautified and enlarged, by the addition of two wings, one of which is appropriated to the reception of syphilitic cases.

Connected is a library, consisting of nearly 1,000 volumes, and which is being annually augmented by the addition of some of the best modern publications. The principal medical periodicals are taken in; and on paying ten shillings per annum to Mr. Higson, house surgeon and secretary, students are allowed the free use of the books. The subscription to the practitioners of the town and neighbourhood is one pound. The sum thus realised is applied to the increase of the library.

I remain, Gentlemen,

Your very obedient servant,

A MEMBER

Of the Provincial Medical Association, and lately a Student of the School.

Beverley, October 8, 1842.

SKETCHES OF AMERICAN PHYSICIANS.

THOMAS HARRIS, M.D.

Dr. Thomas Harris occupies a distinguished and well-earned professional position. With an extensive and lucrative general practice, he combines a high reputation as a surgeon, lecturer, and clinical instructor. He is besides one of the oldest of the medical officers in the naval service, and the "*otium cum dignitate*" which he now enjoys is the reward of previous years of hardship and honorable exertion.

Dr. Harris was born in Chester county, in this state, on the 3d of January, 1784. He is the eldest son of the late General William Harris, who served with distinction in the war of the revolution. His paternal grandfather, a native of Ireland, was a large landholder in the fertile valley of Chester county; his maternal grandfather, a clergyman of the Church of Scotland. The doctor received his education at the Brandywine Academy of Chester county. In the spring of 1804, he commenced the study of medicine with Dr. Davis of the same county, and, after attending the lectures at the University of Pennsylvania, obtained his degree in 1809. For three years afterwards he practised his profession in Chester county with considerable success. In 1812, during the war with Great Britain, he received from Mr. Madison a commission as surgeon in the navy, and joined the Wasp sloop of war, under the command of the gallant Commodore (then commander) Jacob Jones. Hardly in the service, Dr. Harris had the good fortune to take part in one of the most brilliant actions of the war. A week after sailing from Newcastle, the Wasp encountered the sloop of war Frolic, of a superior force, and, after an action of little more than half an hour, captured her. An hour subsequently, however, both the prize and her captor fell into the hands of the Poitiers, seventy-four, which carried them into Bermuda. Here they remained a few weeks, until they were exchanged. Upon returning home, Captain Jones and all his officers, including of course Surgeon Harris, were ordered to the Macedonian frigate. The

Macedonian was blockaded in New London for a year, and thence transferred to the lakes. After serving a year on the lakes in this ship, and in the frigate Mohawk, Dr. Harris was again ordered to the Macedonian, Captain Jones, to form part of Decatur's squadron against Algiers. The Algerine frigate, Mazouda, and a brig of war, were captured by Commodore Decatur. The Mazouda was unprovided with a surgeon, and had suffered greatly during the action. Dr. Harris was placed on board of her, where he had his hands full, with amputations and other operations. After cruising along the Barbary and other ports on the Mediterranean, he returned to the United States with the squadron in the autumn of 1815.

These three years of active service gave Dr. Harris an admirable opportunity of making himself a skilful operator. He had the qualities necessary to turn his advantages to account—judgment, coolness, readiness, and dexterity—and he came out of the war with an established reputation and solid experience.

Upon returning home, Dr. Harris was placed on furlough for a year; then ordered to the *Guerrière* at Boston, where he remained till 1817; and afterwards stationed at the hospital of the Navy Yard at Philadelphia. At this station he has been ever since fixed, with the exception of a short cruise to the West Indies in 1823. In this year, he was sent with Commodore Rogers at the head of a commission to examine into the condition of the seamen suffering from the yellow fever at Key West, and to report as to the eligibility of that port as a station for our squadrons. During his residence in Philadelphia, Dr. Harris has been employed in various capacities in the naval service. He was chosen to select the site for the Naval Asylum in this city and to superintend its erection; and has repeatedly served on the board to examine candidates for the medical corps.

With the advantage of an excellent reputation, Dr. Harris commenced the practice of his profession in this city in 1817. His success has been brilliant. Two years ago, when he was compelled by ill health to relinquish active business, he was in the receipt of a professional income that has seldom been reached in Philadelphia. Dr. Harris possesses in an eminent degree those minor qualifications for professional success, without which the strongest combination of talent and knowledge is unavailing. To an agreeable address, a pleasant flow of conversation, and a cordiality of manner, the more attractive because felt to be sincere, he unites a ready command of resources, therapeutic and dietetic, and the happy capacity of almost endlessly varying them, and adapting them to the tastes of his patients.

Dr. Harris has been for a number of years a lecturer on surgery. In 1823, he formed one of a private association with Drs. Hewson, Meigs, and Bache, with whom he continued till 1826, when he was appointed to lecture on surgery in the Medical Institute. His courses in this school have been eminently popular. We have never heard a better practical lecturer. His style is familiar, sometimes conversational, and his matter has the great attraction of appearing to emanate more from his own experience than the gleanings of books. Dr. Harris has long been a champion of the non-specific doctrines of syphilis and of the anti-mer-

curial treatment of this disease. He devotes a considerable portion of his lectures to this subject, and defends his views ably and ingeniously. Most of our readers will probably take issue with him on this point: at least, our own opinion is, that the mass of evidence, particularly the recent experiments by inoculation, tend to confirm the view of John Hunter "that the venereal disease arises from a poison, which is capable again of producing a similar disease." Dr. Harris has had much reputation in the treatment of syphilitic affections. As he pursues a strictly anti-mercurial course, his success may fairly be adduced to show that the *primary* symptoms of the disease are very manageable without mercury. In 1826, he published an elaborate memoir on this subject in the "North American Medical and Surgical Journal," which was extensively copied into the European journals.

Dr. Harris was for twelve years one of the surgeons to the Pennsylvania Hospital, having held the post from 1829 to 1841, when he resigned from ill health. During this long clinical service, he has been distinguished for the success as well as the number of operations. In 1837 he excised the elbow-joint, for caries—the first time the operation was performed in this country. He amputated the tongue in two instances for hypertrophy. These cases were published in the "American Journal" for the years 1830 and 1837. A series of excellent clinical lectures by Dr. Harris have appeared in this journal.

Dr. Harris has contributed a number of articles to different medical periodicals. In 1821 he published a paper on Metastasis in the "Medical Recorder," which, like the article on syphilis, went the rounds of the European journals. A life of Commodore Bainbridge, published in 1837, is extremely creditable to Dr. Harris's literary powers. This spirited sketch of the hero of the Java may fairly rank with any of our naval biographies.

For a year or two past the state of his health has forced Dr. Harris in a measure to retire from his professional avocations. We are sincerely glad to know that his strength is so far re-established as to permit him to give his summer course of lectures. No member of the profession can claim more of the regard and respect of his brethren, and his return to active duty will give general and real gratification. — *Medical Examiner*.

THEORY OF DISEASE.

By JUSTUS LIEBIG, Ph. D.

(Concluded from p. 42.)

In regard to the nature and essence of the vital force, we can hardly deceive ourselves, when we reflect, that it behaves, in all its manifestations, exactly like other natural forces; that it is devoid of consciousness or of volition, and is subject to the action of a blister.

The nerves, which accomplish the voluntary and involuntary motions in the body, are, according to the preceding exposition, not the producers, but only the conductors of the vital force; they propagate motion, and behave towards other causes of motion, which in their manifestations are analogous to the vital force, towards a current of electricity, for example, in a precisely analogous manner. They permit the current

to traverse them, and present, as conductors of electricity, all the phenomena which they exhibit as conductors of the vital force. In the present state of our knowledge, no one, probably, will imagine that electricity is to be considered as the cause of the phenomena of motion in the body; but still, the medical action of electricity, as well as that of a magnet, which, when placed in contact with the body, produces a current of electricity, cannot be denied. For to the existing force of motion or of disturbance there is added, in the electrical current, a new cause of motion and of change in form and structure, which cannot be considered as altogether inefficient.

Practical medicine, in many diseases, makes use of cold in a highly rational manner, as a means of exalting and accelerating, in an unwonted degree, the change of matter. This occurs especially in certain morbid conditions in the substance of the centre of the apparatus of motion; when a glowing heat and a rapid current of blood towards the head point out an abnormal metamorphosis of the brain. When this condition continues beyond a certain time, experience teaches that all motions in the body cease. If the change of manner be chiefly confined to the brain, then the change of matter, the generation of force, diminishes in all other parts. By surrounding the head with ice, the temperature is lowered, but the cause of the liberation of heat continues; the metamorphosis, which decides the issue of the disease, is limited to a short period. We must not forget, that the ice melts and absorbs heat from the diseased part; that if the ice be removed before the completion of the metamorphosis, the temperature again rises; that far more heat is removed by means of ice than if we were to surround the head with a bad conductor of heat. There has obviously been liberated in an equal time a far larger amount of heat than in the state of health; and this is only rendered possible by an increased supply of oxygen, which must have determined a more rapid change of matter.

The self-regulating steam-engines, in which, to produce a uniform motion, the human intellect has shown the most admirable acuteness and sagacity, furnish no unapt image of what occurs in the animal body.

Every one knows, that in the tube which conveys the steam to the cylinder where the piston-rod is to be raised, a stop-cock of peculiar construction is placed, through which all the steam must pass. By an arrangement connected with the regulating wheel, this stop-cock opens when the wheel moves slower, and closes more or less completely when the wheel moves faster than is required for a uniform motion. When it opens, more steam is admitted (more force), and the motion of the machine is accelerated. When it shuts, the steam is more or less cut off, the force acting on the piston-rod diminishes, the tension of the steam increases, and this tension is accumulated for subsequent use. The tension of the vapor, or the force, so to speak, is produced by change of matter, by the combustion of coals in the fire-place. The force increases (the amount of steam generated and its tension increase) with the temperature in the fire-place which depends on the supply of coals and of air. There are in these engines other arrangements, all intended for regulation. When the tension of steam in the boiler rises beyond a certain point, the

passages for admission of air close themselves; the combustion is retarded, the supply of force (of steam) is diminished. When the engine goes slower, more steam is admitted to the cylinder, its tension diminishes, the air passages are opened, and the cause of disengagement of heat (or production of force) increases. Another arrangement supplies the fire-place incessantly with coals in proportion as they are wanted.

If we now lower the temperature at any part of the boiler, the tension within is diminished; this is immediately seen in the regulators of force, which act precisely as if we had removed from the boiler a certain quantity of steam (force). The regulator and the air passages open, and the machine supplies itself with more coals.

The body, in regard to the production of heat and of force, acts just like one of these machines. With the lowering of the external temperature, the respirations become deeper and more frequent; oxygen is supplied in greater quantity and of greater density; the change of matter is increased; and more food must be supplied, if the temperature of the body is to remain unchanged.

It is hardly necessary to mention, that in the body, the tension of vapor cannot, any more than an electrical current, be considered the cause of the production of force.

From the theory of disease developed in the preceding pages, it follows obviously, that a diseased condition once established, in any part of the body, cannot be made to disappear by the chemical action of a remedy. A limit may be put by a remedy to an abnormal process of transformation; that process may be accelerated or retarded; but this alone does not restore the normal (healthy) condition.

The art of the physician consists in the knowledge of the means which enable him to exercise an influence on the *duration* of the disease; and in the removal of all disturbing causes, the action of which strengthens or increases that of the actual cause of disease.

It is only by a just application of its principles that any theory can produce really beneficial results. The very same method of cure may restore health in one individual, which, if applied to another, may prove fatal in its effects. Thus in certain inflammatory diseases, and in highly muscular subjects, the antiphlogistic treatment has a very high value; while in other cases blood-letting produces unfavorable results. The vivifying agency of the blood must ever continue to be the most important condition in the restoration of a disturbed equilibrium, which result is always dependant on the saving of time; and the blood, must, therefore, be considered and constantly kept in view, as the ultimate and most powerful cause of a lasting vital resistance, as well in the diseased as in the unaffected parts of the body.

It is obvious, moreover, that in all diseases where the formation of contagious matter and of exanthemata is accompanied by fever, two diseased conditions simultaneously exist, and two processes are simultaneously completed; and that the blood, as it were by reaction (*i. e.* fever), becomes a means of cure, as being the carrier of that substance (oxygen) without the aid of which the diseased products cannot be rendered harmless, destroyed, or expelled, from the body; a means of cure by which, in short, neutralisation or equilibrium is effected.—*From Liebig's Animal Chemistry.*

RETROSPECT OF THE MEDICAL SCIENCES.

ANEURISM OF THE AORTA.

According to the best authorities, aneurism of the aorta is one of the most obscure diseases the physician is called upon to treat, in consequence of the admitted absence of any pathognomonic sign by which it can be recognised, until its existence is announced by a tumor capable of being either seen or felt. Laennec observes, that there is not any sure means of discovering these aneurisms by the symptoms, except when the tumor can be felt externally, which occurs only in those cases where the aneurism is abdominal, or where the ascending portion or arch of the aorta being diseased, the sternum has become carious, or the costal cartilages are pushed aside. Dr. Hope, the highest English authority, remarks, that there is only one general sign of aneurism of the thoracic aorta, which is unequivocal and certain—i. e., a tumor pulsating externally. All other symptoms, with the exception of one about to be mentioned, are doubtful—none can be relied upon; the derangement of the functions of the different organs may arise from causes other than the pressure produced by the aneurismal enlargement; any kind of tumor, whether malignant or not, may press upon the trachea, on a bronchus, or on the pulmonary parenchyma, and modify the respiration accordingly; or it may press upon the œsophagus, and cause dysphagia, or on the venous trunks, and produce congestion. The peculiar pulsations of the diseased artery are just as likely to mislead when the tumor is situated internally, and out of reach of being either seen or felt.

The diagnostic sign upon which Dr. Law relies is pain, presented in a twofold character; the one being the constant, dull, aching pain, the other an occasional sharp, darting, and lancinating pain. He believes that this character of pain, when present (for aneurism is sometimes unattended by it), will serve as its pathognomonic sign, nor is he aware of any other morbid condition under which a similar character of pain occurs. It is difficult to state decidedly the cause of these sufferings; the sharp lancinating pain bears some resemblance to the neuroses, while the dull, aching, constant pain, may be connected with the destruction of the structure of the vertebrae, with which it is so often associated, or with the position of the aneurism, it not being able to enlarge itself, from the pressure exerted by the surrounding textures, or it may be the characteristic modification of the sensibility of inflamed arterial tissue. Dr. Law observes, that the greatest amount of suffering has been accompanied by caries of the vertebrae. Pain is a valuable means of diagnosis, under circumstances where the unyielding nature of the parts, in the midst of which the aneurism is placed, does not allow it to enlarge into dimensions capable of being felt. In one of Dr. Law's most interesting cases, a surgeon who was consulted refused to believe in the existence of an aneurism, diagnosticated from the peculiar pain, on account of the absence of an appreciable tumor. His opinion was proved to be incorrect on the examination of the body after death. The size of the aneurism and the degree of attendant pain are generally in an inverse proportion.

Dr. Harrison states, in the fifth volume of the "Dublin Medical Journal," page 435, although he had not sufficient facts before his mind on which to ground his assertion, that aneurism arising from the fore-part of the abdominal aorta, and extending into the cavity, will be attended with pain, and more or less disturbance of the adjacent viscera. This opinion Dr. Law decidedly dissents from; he believes that pain is experienced in aneurism from the front of the aorta only, when the tumor is so situated as to be compressed and restrained from enlarging by the adjoining textures, as occurred in a case under his care, where the disease formed under the crura of the diaphragm. In all other cases of the kind there is a remarkable freedom from pain.—*Dublin Medical Journal*, July, 1842.

CONSTIPATION.

M. Calvi has published a singular case of atony of the bowels, occurring in the person of a young man, twenty-six years of age, of the bilioso-sanguine temperament. At the age of twenty he contracted the habit of onanism, which was followed by the abuse of spirituous drinks. Two years afterwards the stools were voided but seldom, and with difficulty; for the last year they have been passed in the liquid form. The patient stated that for the last four years he had had a stool only every fourteen, twenty, twenty-five, or thirty days, at the end of which period he felt the abdomen become tense, with a feeling of burning heat traversing it from left to right; he became disquieted and stupid, was troubled with vertigo and loss of memory; the urine was more free, and deposited a sediment resembling glue. The loins, shoulders, and neck, were covered with an immense number of tubercles, which discharged a great deal of fetid pus. A dull feeling of weight in the abdomen followed, after which he had an evacuation, produced by violent efforts, and he was then relieved for a time. He had lost all power of erection. No medicinal treatment had afforded him any relief, when he came under the care of M. Calvi, who, regarding the case as one of atony or partial paralysis of the rectum and part of the colon, applied himself so to direct his patient's diet that he should take nourishing food, leaving but little fecal residue, and, in addition, he ordered him to smoke a pipe or cigar every morning fasting, a proceeding which he has found in many cases act as a laxative. Small and repeated doses of tartarised antimony were afterwards had recourse to, with the effect of producing bilious evacuations. Enemata of sulphate of magnesia and tartar-emetic were given two or three times a week, and the bowels were gradually brought into a more healthy state, frequently acting without medicine. The annoying symptoms under which he had labored gradually diminished as the action of the bowels was restored, and the virile power returned to its healthy state.—*Journ. de Médecine de Lyon*.

LARGE DOSES OF IODURET OF POTASSIUM IN SYPHILIS.

Dr. Langevin, of Havre, has detailed a series of cases of secondary and tertiary syphilis, in the "Bulletin de Thérapeutique" for July, in which he found the internal administration of the ioduret of potas-

sium in large doses of exceeding service, in every instance effecting a speedy and sustained cure by its use. The first case he details is that of a young man, twenty-five years of age, who had injured his constitution by excesses, and still further by repeated mercurial salivations, which had occasioned alopecia and the loss of his teeth. When he consulted Dr. Langevin, besides syphilitic exostoses on the ribs and nocturnal pains, his left elbow was converted into a semi-spherical tumor as large as a full grown foetal head, smooth, hard, and polished. The skin was free from redness; the fore-arm was flexed at an acute angle on the arm, and both were atrophied. None of the bony protuberances of the joint could be distinguished. Two scruples of the ioduret of potassium, in a quart of infusion of saponaria, were given daily for eight days, and the dose was then raised to four scruples for the next eight days, at the expiration of which time the tumor was lessened in size one half. Eight scruples a-day were then ordered for a fortnight, and then the elbow had resumed its normal shape and size; the condyles could be distinctly felt in their proper situation, and the powers of flexion and extension were restored. The costal exostoses had also disappeared; the nocturnal pains had ceased from the fourth day. During the treatment the patient had a voracious appetite, some redness of the eyes, headache, and dryness of the throat, which were easily removed.

This case occurred two years ago; there has not been any relapse, and the patient still enjoys excellent health.

The second case is one of chronic syphilitic sore throat, involving all the soft parts; Dr. Langevin prescribed the ioduret internally in the dose of two scruples (afterwards raised to four) daily, an ioduret gargle, and an ointment containing a large proportion of the same salt, which he directed to be rubbed in night and morning over the right testicle, which was affected with sarcocele. The patient was perfectly cured in every respect in three weeks, and has not since suffered a relapse. The third case is one of extensive syphilitic ulceration of the elbow, cured in three weeks by the use of an ioduretted wash, and the internal exhibition of large doses (from four to eight scruples) of the ioduret of potassium in an infusion of dulcamara.

The fourth case presented exostoses of every articulation, besides a swelling on the anterior part of the coronal, and of the cervical vertebrae. The fifth was a case of syphilitic sore throat of some standing, and the last was an instance of ulcers on the legs depending on a venereal origin. In all these cases the large doses of the salt already alluded to were freely administered, and in every instance were followed by a rapid cure.

OSTEO-SARCOMA OF THE LOWER JAW.

A woman, forty-seven years of age, was admitted into the County of Meath Infirmary, under the care of Dr. Byron, with malignant osteo-sarcoma of the lower jaw. The origin of the tumor was traced to a fracture of the bone twenty years before, during the extraction of a tooth. The disease, which was confined to the bone, occupied the right side of the jaw, and caused considerable swelling. The woman was sallow, worn, and cachectic, her nights restless, from

repeated paroxysms of sharp lancinating pain; the tumor impeded articulation and deglutition, and bled when touched, discharging a thin, foetid sanies.

Dr. Byron performed a bold operation on this patient, excising the right half of the lower jaw, and disarticulating it at the socket. The carotid artery was not injured, but the facial and transverse facial arteries were divided, and required ligature. About ten ounces of blood only were lost. The operation lasted twenty minutes, and the patient bore it remarkably well, walking to her bed from the room when it was concluded. She perfectly recovered, and has not had a relapse since, although eleven years have passed since the disease was extirpated.

The examination of the removed bone showed that it was hollowed out, so as to be as thin as paper, and altogether wanting on the alveolar aspect, which was occupied by the foul excrescence. This latter was continuous with and sprung from a mass of disease, which occupied about two-thirds of the cavity. Its surface in some places exhibited an extremely minute arterial vascularity; it was smooth, but irregular and tuberculated. The part which had been divided by the chain saw was made up of soft, brain-like matter, combined with a more firm granular substance, containing various cysts, the walls of which were made up of spiculae of bone, so firmly compacted in some places as to resist the scalpel, while in other parts it was merely semi-cartilaginous, and could be easily divided by the knife. These cysts contained a firm, white, gelatinous substance, which, however, was easily removed, leaving the walls or internal surfaces smooth, white, and irregular.

This case Dr. Byron regards as affording a good specimen of encephaloid cancer, combined with colloid (*matière colloïde* of Laennec, cancer gelatiniforme or aréolaire of Cruveilhier), a combination by no means common. It has been said that encephaloid cancer always returns after an operation, but this case proves an exception to the rule, which the operator attributes to his having removed it before the soft parts became implicated. He says, "By contrasting this with those cases where the soft parts are involved, a practical rule of great value becomes apparent—namely, that in the one excision of the part would be cruel, and calculated to bring the science of surgery into disrepute; whereas in the other, even in its most extended form, the soft parts not being implicated, the operation is safe, and almost certain of success, provided the patient has sufficient strength to endure it."

Dr. Byron considers that the following inferences are fairly deducible from the experience already obtained on the subject of osteo-sarcoma of the lower jaw-bone:—The disease almost always commences in the cancellated structure of the bone, and has usually, if not always, a cystic origin, which it maintains, more or less perfectly, throughout its entire growth. It is always, as far as recorded facts go, mild under the age of twenty-eight or thirty years; and although it does not necessarily become malignant after that period of life, still it frequently does, ultimately involving the soft parts in its neighbourhood, and uniformly assuming the characters of carcinoma. It is almost always curable by free excision before the soft parts are engaged, which does not take place for some

time, often several months after it has changed into the carcinomatous or malignant form. Cancer of the face, especially of the bones, admits of cure more frequently than when seated in any other part of the human frame, cancer scroti, chimney-sweeper's cancer, perhaps excepted.—*Dublin Medical Journal*, July, 1842.

ANTHRAX PRODUCED BY DISEASED MEAT.

Dr. Odoard Turchetti has published several cases of anthrax, caused by the ingestion of diseased meat. It appears that in 1811 an epidemic anthrax of the tongue raged to a great extent among oxen, and the flesh of one of those which had died of it was publicly sold at a low price in the market-place at Fucecchio. The meat did not present any appearance likely to create suspicion.

In some of those who partook thereof, small and very painful tubercles, surrounded with a red areola, or small whitish pustules with a purple or violet-colored circle, gradually increasing in size until they assumed the genuine characters of anthrax, showed themselves on the face, lips, neck, or arms, in the course of from twenty-four hours to three days. In almost all these cases, the slough was separated by an inflammatory process at the end of a week, leaving a more or less healthy ulcer, which was cicatrised speedily by emollient and detersive applications.

In the more severe cases the pustules ran together, and the anthraxal inflammation spread like erysipelas, accompanied by extensive livid swelling of the parts, and complicated with obstinate gastro-intestinal derangement. The sloughs in these cases did not separate for a fortnight, and left an unhealthy ulcer, which was induced to cicatrise with great difficulty. Two aged persons died from the disease.

Children under six years of age, elderly people, and persons of a weakly constitution, were those who were brought under the malignant influence of the poisonous food; persons in the enjoyment of full health and strength generally escaped. The general symptoms produced were—diarrhœa, vomitings, meteorisation, borborygmi, anorexia, intense fever, subdelirium, prostration of strength, abdominal pains, insomnia, tendency to serous effusions, epistaxis, &c. The employment of emeto-cathartics and active antiphlogistics are said to have proved the most useful auxiliaries in the treatment of this form of anthrax. Convalescence was very protracted.

A young man, named Marraddi, eighteen years of age, twenty-eight hours after having partaken of this food, had an anthrax form on the upper eyelid of the left eye, which caused the mortification of the whole of that side of the face and neck and part of the chest. The slough came away at the end of a fortnight, leaving an enormous ulceration, which suppurated abundantly and healed very slowly. The antiphlogistic plan of treatment was employed.—*Annali Universali di Medicina*.

RETRO-PHARYNGEAL ABSCESS.

The infrequency of a collection of pus in the sub-mucous cellular tissue behind the pharynx, the obscurity of the symptoms, and the danger to life caused by the existence of a retro-pharyngeal abscess, render it a subject of great importance and interest. M. Mondière has collected a series of these cases, drawn from various authors, which may serve to remove in part

the obscurity that hangs over the semeiology of this disease. Out of 18 patients, 11 were adults, and the remaining 7, children from eleven weeks to four years old. In three cases, the abscess was caused by the existence of an inflammation of the mucous membrane of the pharynx, which had been propagated to the sub-mucous cellular tissue. The retrocession of erysipelas appeared to have produced it in another case; in two others it seemed to depend on rheumatism, and in one to have been caused by a stricture of the œsophagus just below it. Caries or tubercular disease of the cervical vertebræ is another cause, the abscess being merely symptomatic. Several examples of this have been placed on record, but, in examining the part, the simple erosion of the bone caused by the prolonged contact of the purulent matter must not be mistaken for caries.

The progress of these abscesses is generally acute, the symptom of suffocation, however, not showing itself until the abscess is fully formed. The collection symptomatic of caries must necessarily be chronic in its formation, and nevertheless the dyspnœa and dysphagia come on suddenly, in conformity with the pathological law, that a gradual compression may be exercised with impunity for a long while on organs the most essential to life, no symptoms being produced until the pressure had been carried beyond a certain amount.

The termination of these abscesses is not fatal when they have been recognised and opened early. Death occurred only once out of thirteen cases where the abscess was opened, but if the disease is mistaken, death is almost inevitable, either from suffocation by pressure, or from its bursting into the trachea or chest. Examples are recorded by Messrs. Mott, Manoury, Dariste, Petrunti, and Mondière.

The primary symptoms are, local pain and an injected state of the pharyngeal mucous membrane with or without fever, and followed by difficulty of swallowing or breathing. At the end of a certain time another set of symptoms show themselves, resulting from the formation and accumulation of pus, such as irregular shiverings, œdema on the sides of the neck, more or less tumefaction of the posterior paries of the throat, and threatened suffocation. To these Petrunti adds displacement of the larynx forwards.

The diagnosis would not be attended with difficulty if the surgeon were to think of the possibility of such an abscess forming, and to examine the posterior part of the fauces, as the tumefaction is so well marked. The dyspnœa, however, so closely resembles that of other complaints, that the existence of an abscess may not be suspected. The complaint it most closely resembles is croup, from which it may be distinguished by the symptoms in croup not being continuous, while they are so in the retro-pharyngeal abscess, although they have an occasional exacerbation. Besides, the difficulty of breathing and the agitation of the patient are increased by pressure on the larynx, which is not the case in croup. The dysphagia also increases at the same time with the dyspnœa. The safest plan, however, is to examine the interior of the throat with the finger, an exploration that should be made in all diseases resembling croup or œdema of the glottis.

The only indication with regard to the treatment is to give a speedy exit to the pus, which should be done

as soon as fluctuation is evident, either with a bistoury or pharyngotome. Mr. Fleming uses a trocar that he has had constructed for the occasion, but it has the inconvenience of the opening being liable to close, and thus requires repeated punctures. Dupuytren advises a large incision to be made. When the mouth cannot be opened sufficiently wide for an instrument to be used with safety, it would be advisable to burst the abscess either with the finger or the handle of a spoon, pressing gently at the same time with the thumb and fingers on the side of the neck on a level with the larynx, to prevent the matter spreading laterally; or a pair of scissors may be used, one blade being sharp-pointed and shorter than the other, which should be blunt. The instrument may be passed closed to the back of the pharynx, then the sharp blade separated, thrust into the abscess rather obliquely, and the blades being closed, a free incision would be readily made without danger.—*L'Expérience*

COLICA PICTONUM.

Dr. Forry, in a statistical work on the sickness and mortality of the army of the United States, observes that this complaint is seldom met with in America, but has been several times observed among the troops, more especially at Fort Severn, Annapolis, Fort Delaware, near Newcastle, and Fort Monroe, Virginia. At Fort Delaware, in 1827, the disease evidently arose from the use of water collected from an immense roof painted repeatedly with one of the preparations of lead. In most cases, says Assistant-surgeon Smith, it was manifested by violent pyrexia, excruciating pain in the intestines, accompanied with an evident contraction in some portions of its calibre, and obstinate constipation, to overcome which baffled every effort for many successive days. In two instances, after a lapse of many days, balls of indurated feces of the size and form and almost the hardness of a nutmeg, came away, covered with inspissated mucus bearing a close resemblance to membranes. Several patients were deranged from the intensity of their sufferings during the exacerbation of the pain, and the stoutest hearted soldier could not refrain from loud lamentations.

The connection of the disease with the tank water obtained from the painted roof, was clearly shown by its subsidence when pure water was procured for the soldiery from the Schuylkill. No deaths occurred. The treatment employed was large blood-letting, the warm bath, brisk purgatives, tartarised antimony, opiates, and blisters.

Fourteen fresh cases occurred in the succeeding quarter referable to the same cause, three of which had partial paralysis afterwards. One man, who had had two attacks of enteric inflammation, insisted, though very feeble, on returning to duty. He was seized with a chill in the night, in February, which he supposed to be an attack of intermittent fever, but which proved to be typho-mania, under which he lingered for thirty days, dying at last of absolute debility. In the next quarter, six new cases of colica pictonum occurred, one of which, the third attack, proved fatal. Dissection showed a mortification of five fingers' breadth around the arch of the colon, and six lines below it there was a stricture in the intestine. The omentum was entirely wanting.

At Fort Monroe, according to the evidence of Sur-

geon Everett, the use of sheet lead for covering the boilers and furnaces in the kitchens of two companies, the covers being painted over before each weekly inspection, produced the most disastrous results. Colic, paralysis, and ulcers in their most frightful and obstinate forms, appeared in more than twenty cases in these two companies. The health of all was much impaired, and one death ensued.

The local action of the poison in producing paralysis of the hand and forearm was ascribed to the use of white lead in cleaning the belts and gloves, the soldiers being obliged to moisten it, and apply it with a sponge. In 1831, cases of obstinate constipation of the bowels, accompanied in some instances by paralysis of the hand and forearm were so frequently reported, that it was deemed necessary to interdict, by a general order, the use of white lead in cleansing soldiers' belts and gloves, and to substitute pipe-clay.—*American Medical Journal*, April, 1842.

INDURATED CELLULAR TISSUE.

Dr. Hayn, professor at the University of Königsberg, made a microscopical examination of the indurated cellular tissue of a child, which had died twenty-four hours after the invasion of the disease. On examination of the body, the muscular system was found to be the seat of the disease. The affected muscles were found to have been changed into a hard solid substance of a vitreous and almost transparent aspect, cutting with a noise analogous to that produced by the section of scirrhus tissue. All the diseased muscles were simultaneously contracted.

When examined in the microscope, their structure was found to have been completely changed: they were formed of fine longitudinal, parallel fibres, possessing great extensibility. Scarcely any of the affected muscles were diseased in their entire structure, portions of healthy fibre being found here and there.

No pathological alteration could be discovered in the internal viscera with the naked eye, but on each side of the lower jaw, at the angle in the parotid region, was found a fatty cyst, having all the characters internally of healthy adipose vesicles.—*Caspar's Wachenschrift*.

POISONING BY SQUILLS.

A man, fifty-eight years of age, was afflicted with general dropsy from insufficient nourishment, anxiety, and great fatigues, unattended by any symptoms of organic disease. From this he was relieved by the use of diuretics and bitters, but, the complaint returning, he was induced to have recourse to an old woman, who promised to cure him effectually. In accordance with her directions, he procured some squill cut into small pieces, which he digested for forty-eight hours in nine ounces of white wine. Half this quantity he drank at once, and as it caused violent colic, he thought it necessary to assist its action by taking several spoonful more, which produced an increase of the colic and severe nausea. These symptoms not having ceased for a moment, after the lapse of twenty-four hours he sent for medical advice; he had then a red and burning face, with cold hands and feet; pulse small and contracted, and the abdomen so tender to the touch, that he could not bear even the sheet over him. He died on the second day in spite of all that could be done for him. From the chemical analysis of the rest of the tincture, it appeared that he

had taken, altogether, five scruples of extract of squills.—*Medecin, Corr. Blatt. : Bayerischer.*

HEMERALOPIA.

Night blindness, says Dr. Forry, is eleven times more prevalent in the southern, than in the northern divisions of America; in other parts of the United States it is almost unknown. In Florida it may be regarded as endemic. The pathology seems to exist in an exhaustion of the power of the retina, in consequence of exposure to strong light during the day; or in other words, vision ceases because the retina, after having been exposed to a long and brilliant sunshine, is not excited by the feeble light which continues after sunset. The disease is consequently rarely met with, except in the southern latitudes, or those regions in which the ground is covered many months with snow. In Florida, as in the West Indies, the causes productive of it are, the full glare of a vertical sun in an unclouded sky, and the reflection of the solar rays from the surface of water or from a sandy soil. Its duration in Florida varies from one night to six or twelve months, whilst relapses are frequent. The treatment which is modified in accordance with the accompanying functional derangement, usually consists in confinement to a dark room, the use of emetics and cathartics, and the application of cupping-glasses and blisters to the temples and nape of the neck; but these remedies, as well as salivation, prove in many cases wholly unavailing. When remedial measures fail in tropical regions among those from northern latitudes, a return to one's native clime is obviously indicated.—*Dr. Forry, Amer. Journ. Med. Sci., April, 1842.*

OBITUARY.

At Madras, on the 8th of July, Surgeon G. Hopkins, M.D., Medical Establishment.

At Quilon, on the 22nd of July, Assistant-surgeon R. Maginniss, Medical Establishment.

At the General Hospital, Calcutta, on the 20th of July, M. H. Smith, late surgeon of the ship Burma.

PROMOTIONS AND APPOINTMENTS.

MILITARY.

22nd Foot—James Prichard Moline, gent., to be assistant-surgeon, vice Campbell, promoted.

50th Foot—Cuthbert Fetherston Hough Barlow, M.D., to be assistant-surgeon, vice Mc Bean, deceased.

58th Foot—Assistant-surgeon Richard Bannatine, from the 56th foot, to be assistant-surgeon, vice Denny, appointed to the staff.

Hospital Staff—To be Assistant-surgeons to the Forces—Assistant-surgeon William Denny, from the 58th foot, vice Cooper, appointed to the 17th Light Dragoons; George Buttlar, gent., vice Ross, deceased.

NAVAL.

Assistant-surgeon F. B. Pritchard, to the Orestes.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, October 7, 1842.

R. D. Adams, W. Thomas, J. Cornan, W. G. Walker, H. St. J. Clarke, G. Stockil, J. Christie, G. H. Maasdorp, A. G. Purchas, J. Kenyon, H. Greaves, W. C. Thurgar.

APOTHECARIES' HALL.

Licentiates admitted Thursday, September 29, 1842.

W. W. Hyde, Witney, Oxon; A. G. Purchas, Pilstone, Chepstow; F. A. Tipple.

October 6, 1842.

W. A. Sumner, London; W. N. Clarkson, Whitby; J. Moore, Wickham Market, Suffolk; J. Vincent, Horningtoft, Norfolk.

BOOKS RECEIVED.

Observations regarding Medical Education. By John Simon. London: Renshaw, 1842. pp. 32.

A Treatise on the Enlarged Tonsil and Elongated Uvula. By James Yearsley. London: Churchill, 1842. 8vo. pp. 83.

LITERARY INTELLIGENCE.

Mr. Renshaw will publish, in a few days, a translation of the excellent Manual of Diseases of the Skin, by MM. Cazenave and Schedel.

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TO CORRESPONDENTS.

M. R. C. S. (Newark).—The medical attendant of a dispensary being bound "not to attend any person professionally but recipients of the charity, and not to receive any fee or gratuity from a patient"—have the governors of the dispensary any right to claim a fee which the medical officer of the dispensary may receive from a coroner for attendance on an inquest on a dispensary patient? Certainly not. The claim is as unjust as it is illiberal.

A. B.—The new regulations of the College of Surgeons require attendance on the surgical practice of an hospital during three years, and on the medical practice during one year; but the twelve months medical practice may be attended during any of the three years devoted to surgery. It is thus that our expression "four years' hospital attendance" is to be understood.

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INTRODUCTORY LECTURE

TO

THE COURSE

ON THE

THEORY AND PRACTICE OF MEDICINE,

At the Bristol Medical School—Session 1842-3.

By Dr. SYMONDS.

GENTLEMEN,—The course on which we are about to enter is devoted to the Theory and Practice of Medicine—the science and the art—the knowledge of the phenomena of disease, their relation to agents which cause, or remove, or diminish them, and the application of that knowledge to particular exigencies.

A science consists of the description of a collection of facts, and of reasonings upon those facts. What are the facts of which medicine is composed? They are such as the following:—It has been observed that sick persons sometimes lie helpless, prostrate, insensible to all that passes around them, speechless, or muttering inarticulately; or that they are violently excited by ordinary perceptions, starting at a footfall, thrown into convulsions by the opening of a shutter, and incessantly raving; that they complain of burning thirst, refuse food, reject it when swallowed; or that they shudder at the sight of liquids, and that they devour the strangest substances; that they pass days or weeks, or more, without excretion, or that they are hourly subject to evacuations; that their skin is dry as parchment, or as sodden as a wet sponge; that they are racked with aches and pains, cramped and distorted with spasms; or that they are benumbed and palsied, feelingless, motionless. It is observed that they have tongues dry, rough, and encrusted, or dripping, glazed, and unnaturally clean; that they breathe pantingly or heavingly; that they have pulses fleeting away at railroad speed, or limping, fainting, fluttering; and so on.

These are facts; but independently of any wish to prevent the recurrence of such events in man's history, we naturally ask what, in a scientific point of view, is to be made of such heterogeneous facts? In other words, we cannot be content to detail or hear them detailed—we must reason upon them. Now to reason, as I observed on a former occasion, is to find the relations of things, in obedience to an instinctive propensity, common in less or greater degree to all mankind—and one of the first relations we discern, or seek for, is that of likeness, and the act of so discerning or seeking is called comparison. We should ask, are all sick persons so affected, or may these phenomena be collected and arranged in groups, observed in different individuals? How are they produced?—by agents within the body or out of it? Do they continue, or do they last only for a time, and then disappear? Do they reappear at certain periods, or

do they only remit?—or do they end in death? Are they removable, or only susceptible of abatement by remedies? In obtaining answers to a thousand such questions we get the science of medicine.

Technically, medicine is divided into Symptomatology, Pathology, Semeiology, *Ætiology*, and Therapeutics. On each of these divisions I shall make a few general remarks.

Symptomatology is, as the word imports, the doctrine of symptoms. Symptoms are literally things that happen together in a sick person. They are such changes of the patient's vital actions, feelings, movements, and so forth, as are taken cognizance of by his own senses, or by the senses of those about him. The totality of these is sometimes considered the disease, as in fever; or some one of them, to which the others are viewed as secondary, as phrenitis. The patient's case is an enumeration of the symptoms from their onset to their final disappearance. To a certain collection of symptoms coexistent, or occurring in a certain series, a particular name is given, and it becomes a species. The classification of cases with an appropriate nomenclature, is called nosology. In a given case to recognise an assemblage of symptoms, as described by others under a certain specific application, is to make a diagnosis. But this term is sometimes applied to the discrimination of the case from some other form of disease with which, by reason of a certain degree of likeness, it might be confounded. In modern use, diagnosis is also applied to the recognition of the proximate cause of the symptoms, or the pathology of the case.

Till comparatively recent times all that was most valuable in medical science was comprehended under symptomatology—the knowledge of the order of the symptoms, and of their yielding or resistance to remedies. Much pathology was mixed up with it, but being the result of mere mental speculation rather than of the observation of nature, it was good for little.

What, then, is pathology? It proposes to treat of the nature of diseases, their essence. It is not, like symptomatology and nosology, busied in merely enumerating and arranging morbid phenomena, but it treats of the alterations in the body from which those manifestations of disorder take their origin. It goes, so to speak, to the root of the evils. The pathologist is not satisfied with knowing that a patient has a foul tongue, a pain in the stomach, a quick pulse, and a hot skin; but he must know, if possible, why these symptoms have occurred, what relation they bear to some less obvious sources of mischief, the removal of which is necessary before the former can be expected to vanish. Now these fundamental lesions, like symptoms, are deranged vital actions, or the effects of such derangements; but they involve organs more intimately connected with life than those from which

arise the most of what are called symptoms, and they are for the most part deep-seated, lying in viscera which are enclosed in cavities shut out from sight. How, then, are we to recognise them? By the following methods: the study of physiology, of morbid anatomy, and of chemistry. Pathology, indeed, is morbid physiology. Physiology alone will not tell the structural alteration on which the symptoms depend, but it may tell the function that is primarily affected, and of course the seat of that function—in fact, the *sedes morbi*. It will in some cases reveal much more than even pathological anatomy. To take an instance: the primary seat of that dreadful malady, tetanus, has never been revealed by the scalpel, but the physiology of the nervous system, as developed during the last few years, points, I may say unerringly, to the spinal chord as the true location of the disease; though the structural nature of it is still a mystery, yet not more a mystery than is the instrumentality of all nervous matter in the performance of its several functions.

Morbid anatomy is, however, of vast importance, and has contributed to the great modern improvements in medicine far more than any other method. It is, indeed, a comparatively new species of research. When I say new, I mean in reference to the high antiquity of our science; for, notwithstanding Pliny informs us that it was the custom of the kings of Egypt to assist at the inspection of dead bodies, and thus to have ocular demonstration of the causes of disease (*Iis [regibus] erat studium corpora scrutari mortuorum, et causas valetudinum oculatâ fide recognoscere*), there is no reason for thinking that much came of such inspections. In the records of medicine we find nothing precise on the subject earlier than the beginning of the sixteenth century, when Antonio Benevieni, of Florence, published a treatise, "*De abditis nonnullis ac mirandis morborum et sanatorium causis*" (1507), consisting chiefly of some cases of scirrhus of the stomach, biliary calculi, and concretions in the great blood-vessels. After him, Schenckius, Plater, Fabricius, Sennertus, Tulpus, Bartholinus, and others, related remarkable instances, some more marvellous than accurate, of changes in the internal organs discovered by dissection. Our immortal Harvey had made many necroscopic observations, with the view of discovering the causes and seats of maladies, and, had he lived long enough would probably have given the results of them to the world. But the first systematic treatise on the subject was the "*Sepulchretum Anatomicum*" of Bonetus (1679), a repertory of facts of great interest, derived from many sources, and forming a compilation, rather than containing the results of his own observations. But, as a philosophical work, it is very inferior to the great production of Morgagni, "*De sedibus et causis morborum*." This admirable writer does not content himself with naming the disease, and then describing the appearances found in the dead body, after the manner of Bonetus; but, by patient and rigorous analysis, he investigates the connection between the changes found on dissection, and the symptoms which occurred during life. This method, though so well illustrated by Morgagni, was not for many years followed up with due vigor; but, from the time that it became general in this country and on the continent,

we may trace a rapidly increasing progress of pathological science.

Morbid anatomy, in exposing faults of structure, ministers to medicine in two ways—first, by showing how the functional disorders, under the form of symptoms, were caused by such changes in the organs as prevented their proper action; and secondly, by revealing a tendency to similar disease in several parts of the same body, and so leading from special pathology to general pathology, or the knowledge of those general faults in the economy which are pre-existent to the local diseases.

Chemistry is a third help in pathological investigations, in so far as it enables us to recognise alterations in the composition of the fluids, whether of the blood itself, or of the secretions; for changes in the latter intimate a change in that from which they are formed, or in the secreting organ. It has already enabled us to ascertain with accuracy that in inflammatory diseases the quantity of fibrin is increased, that in diabetes the blood is impregnated with sugar (a fact that alone has cast a blaze of light on what was previously one of the darkest objects in pathology); and it has taught us, thanks to Dr. Bright, to recognise a peculiar disorganisation of the kidney, by the discovery of albumen in the urine, this fluid being at the same time of a low specific gravity. This department of knowledge has, till very lately, been but slightly cultivated; it promises rich results to future inquirers. The same remark applies to the microscopic examination of tissues and fluids. The accessions made to minute normal anatomy by this method within the last few years are prodigious, and none more striking than those relating to the structure of mucous membranes and secreting glands; but pathological anatomy is by no means indebted to it. Witness its applications to carcinomatous growths. The composition of the fluids in disease has been still more strikingly illustrated by the microscope. We now readily distinguish the pus globule and the blood globule in urine. In the blood are discerned changes in the forms of the globules, indicative of morbid diatheses. In some morbid secretions parasitic growths are revealed, which, till the use of this instrument, were altogether unsuspected. When this method and pathological chemistry shall have yielded the same proportion of knowledge as we have derived from morbid anatomy, pathology will have made an advance towards perfection infinitely surpassing its present development. It will lead in its applications to the prevention or early recognition of many fearful diseases, which are now only known to us after they have made their deadly inroads on solid structure, and irretrievably poisoned the fluids.

Semeiology is the knowledge of signs, the interpretation of symptoms, the discernment of them as indications of mischief in some part of the body not subjected to ocular examination; as, for example, the symptom palpitation may indicate disordered action of the heart; delirium, disturbance of the brain; a red tongue, irritation of the stomach. Symptoms thus viewed are diagnostic signs. But some signs are not symptoms, for they may be impressions on our senses, derived from the mere physical changes in the structure of the body; such is a dull sound on percussion of the chest, where it ought to be a clear one, indi-

cating that either fluid has been effused into the pleura, or that the lung has become dense instead of porous. The recognition of signs, or semeiology, may be considered almost equivalent to diagnosis. It will be considered at large on a future occasion.

Ætiology is that department of medicine which considers the causes of disease; not, however, those causes of which we have just taken notice in our remarks on pathology, and which are the strict causes, the *causæ causantes*. I shall speak hereafter of the different divisions of causes which have been proposed at different times. But at present we need only advert to the distinction of causes, as proximate and remote. The proximate is the event immediately prior to the disease, and the event without which the latter would not have taken place. It is identical with what we often speak of as the pathological state of the patient, or the cause of the symptoms. You will be puzzled, as many have been before you, if you are not aware that when this term, proximate cause, received its present application, the disease meant always a collection of symptoms. Confusion on the subject has arisen from its having been, since the greater attention paid to pathology, customary to speak of "the disease" not as the congeries of symptoms, but as the disease, *par excellence*, and the cause of the symptoms. When we say that the disease which a patient labors under is peripneumonia, we do not merely signify that his symptoms are such as correspond to the symptomatic definition in Dr. Cullen's or any other Nosology, but that the lungs are inflamed. The disease, then, so understood, is identical with what used to be called the proximate cause. Were we in all cases acquainted with the part and state of the body on which the symptoms depended, we might confine the word disease to the expression of the pathological cause, and speak of the symptoms as separate from and secondary to the disease. But to this perfection of knowledge we are not yet arrived. What do we mean by hydrophobia? In answering this question we are obliged to describe the symptoms presented by a person bitten by a rabid animal, one of them being (as in many other cases, icterus and phthisis, for examples) that from which the name is taken; but the proximate cause of those symptoms is at present only conjectural, though their seat may be inferred from physiology.

But while you will have perceived that in some cases what was once held to be the proximate cause, may have been merged into the disease itself, yet you will not be so unphilosophical as to suppose that there is really in such cases no proximate cause. Such an idea is absurd, for there must of course be the proximate cause of the proximate cause itself, every event having been preceded by something on which it inevitably depended. Proximate cause is but a relative term. It expresses the event which we trace nearest to the symptoms which constitute the disease. The proximate cause of the symptoms in diabetes mellitus is a certain change in the composition of the blood, which contains sugar, and is probably deficient in some of the important nutritive principles; but what is the proximate cause of this state of the blood? Defective digestion of the amylaceous principle, whereby sugar has been formed in the stomach, or has not undergone the proper organic conversion.

And what is the proximate cause of that fault in the digestive process? It remains to be proved. We conjecture some defect in that gastric secretion which is the great agent in the first stage of digestion. And here I may incidentally remark, we have a glimpse of the great arena on which future discoverers are to display their prowess—namely, in finding the state of the organ, and of the whole economy of solids and fluids, immediately prior to the formation of the local disease. Diseases, except when forced on the body by mechanical violence, or by chemical or poisonous action, do not occur without some preparation.

This preparation is effected by some of what are called the remote causes, or events earlier in the train. These, according to their degree of remoteness, are distinguished as predisposing, and exciting, or occasional, or determining, the latter being the latest in occurrence. Call the disease the ultimate event, then the exciting is the penultimate, and the predisposing ante-penultimate. Suppose apoplexy the disease, hæmorrhage into the substance of the brain, or compression from congested capillaries, or simple obstruction of the cerebral circulation, may be the proximate cause; the exciting cause may be an alcoholic draught; the predisposing cause, plethora, or a fragile state of the cerebral arteries. In acute diseases our attention is more directed to the exciting than the predisposing cause, which is often and injuriously lost sight of. In chronic affections, on the other hand, it is more difficult to apprehend the exciting cause. We sometimes speak of morbid agents prior to the predisponent. Thus we say that a person's habits engendered a predisposition, as full, luxurious living creates the plethora, which, under the action of a stimulant, induces the disease, apoplexy. The ancients recognised such distinctions in their terms *egumenæ* and *pro-egumenæ*—antecedents and præincipientes. You will find that when treating of ætiology in general, I shall consider the remote causes under the heads of internal, or those conditions within the body predisposing to or determining disease; and external, or those presented by the agents around us, some of them being modifications of common vital stimuli, as air, temperature, electricity, aliment, &c.; others specific, or existing only under particular circumstances, such as malaria, contagions, poisons.

The last and the most important branch of medicine is therapeutics, the *ratio medendi*.

Medicine is the art of healing and relieving the sick, or it might otherwise be defined as the art of curing diseases; but, in using the latter terms, it is necessary to bear in mind the primitive sense of curing—that is, treating or taking the care or management of, there being many diseases, the cure of which, in the generally received sense of the word, is at present beyond our reach. That what I have hinted at is the original meaning, appears at once in the old saying, "*Natura sanat, medicus curat morbos.*" I shall have frequent occasions hereafter to remind you that there is another difference between the two definitions. It is one thing to cure diseases, and another to cure patients. The former may be done with great *éclat*, while the latter is left undone. To-day, by a vigorous use of the lancet and revulsive remedies, I may have put an end to an hæmoptysis; to-morrow

my patient may die of syncope from the loss of blood.

I have said that medicine is an art; as such, it is an example of the subjugation of nature to the mind and will of man. It is not, as I shall presently attempt to show, a mere imitation of nature. Nature must be the instructress, yet only to become the servant of man. To master her powers he must observe them accurately; but when he has made them work his purposes, he cannot be said to have been the mere follower of nature, otherwise than as the workings of his own mind are a part of nature's operations, in which sense we lose sight of the common meaning of nature, which to the observer is objective. Art, then, is external nature moulded to the desires of man; just as nature in its widest signification, including man and the whole universe, has been sublimely said to be the "art of God."

The connections between art and science I shall not trace on the present occasion, having formerly treated of them in this place; * I shall enter at once on the consideration of the principles on which the art of medicine is or ought to be practised.

Very different principles have been taught by different professors of the art. One of the oldest divisions among physicians was that of the empirical and the rational; the former professing to observe the action of remedies, and to give like remedies in like cases; the latter to ground the use of their measures on their knowledge of the functions of the body, the nature and causes of diseases, and the presumed fitness of remedies. The rational sect have also been called dogmatic or theoretical practitioners. Let us take an illustration. A patient is presented subject to epileptic fits; the empirical practitioner proposes to give him nitrate of silver, or indigo, or powdered misletoe, or some other one of the thousand specifics of vaunted efficacy in this disease. Ask him why he makes this suggestion. His answer, if he is a consistent empiric, will be, that he knows nothing of the *modus agendi*, but that from frequent observations on his own part, and that of others, he is satisfied that the disease is likely to disappear after the use of the *nostrum*; that is, he has seen it so removed once, twice, a dozen, or fifty times, and he expects a similar success in the case before him. But what says the rational practitioner? He begins with unfolding his view of the pathology of the case. He may consider, for instance, that during the paroxysms there is unquestionable evidence from the spasms, the convulsions, the loss of consciousness, that the vessels of the spinal chord and the brain are overloaded with blood; also that in the intervals the patient presents symptoms of tendency to congestion, though in less degree, of these organs; that the heart beats with undue impetus, and so forth; and therefore he opines that measures should be taken for relieving the distended blood-vessels during the fits, and for subduing the congestive tendency in the intervals, whether by reducing the amount of blood in the whole system, and lowering the action of the heart, or by equalising the circulation by derivants to the surface of the body and the extremities. Or he may take a somewhat different view. He may urge that though the paroxysmal symptoms certainly indicate a turgid state of the cerebro-spinal capillaries,

yet this, like the morbid orgasm of other parts, may be owing far less to any general fault of the circulation in the way of excessive tone, than to extreme irritability of the nervous system which has engendered the morbid state of the capillary circulation; that to abstract blood, would be a sure way of aggravating the excitability, and that the most rational remedies would be such as soothe the nervous system when excited, and such as lessen its mobility, by increasing its tone; or he may lay down a third doctrine. He may say all this disturbance of the spinal marrow and brain is caused by some irritating agent operating upon the extremities of the incitor or afferent nerves, and that it is useless to direct measures against the nervous centres when the mischief lies in some part of the periphery. Let us investigate, says he, and we shall find some disturbing cause acting on the febrils of the fifth pair in the teeth, or on those of the par vagum in the stomach, or on the uterine nerves. Having found this, we must set to work and remove it, and then there will be no more eccentric irritation of the excito-motory system. To return, I suspect that the distinction between the above classes of practitioners, although it corresponds with the difference in the habits of thought common to two classes of men, has reference more to degree than to kind. There are few—very few—who are absolutely empirical. Under the guise of the most simple form of empiricism we can often detect a lurking theory. It is not in the nature of the human mind, however unphilosophical the individual may be, to observe facts at all times in simple sequence, without the intervention of some cause fancied by the individual. The most ignorant of our empirics not unfrequently in the very announcement of their pretended remedial discoveries, and while the very words of scoffing at theories and philosophers are yet on their tongues, betray the thralldom maintained over their minds by dogmas and hypotheses, which, though once dominant in the high places of philosophy, have been exiled in favor of other dynasties, and compelled to seek a more appropriate sway over the credulous vulgar. Or—to take a far more respectable instance of the truth of our remark—the savage who has seen the fever of his companion dissipated by drinking of a pool, in which a potent vegetable has accidentally been macerated, does not content himself with the mere observation that his friend had a fever, that he drank of the water and recovered, but he views the fever as the production of a malignant spirit, and the water is to his apprehension endowed with some secret mysterious power "by the unseen genius of the wood."

Those who have been professedly rational practitioners have acted, as might well be expected, according to very different systems. Thus, we have the expectant method, the perturbant, the eclectic. One or two remarks may be sufficient to sketch their respective peculiarities.

The physicians of the expectant school are those who pin their faith on the "*vis medicatrix naturæ*"—who think that if this power fails, no other can be looked to for aid. They presume that in all cases curable at all, nature herself tends to bring about the desired result, and that the doctor has only to stand by and assist. He is to be emphatically the "*interpres et minister naturæ*," carrying out her designs

* Provincial Medical and Surgical Journal, October, 1840.

if her energies are languishing, he must endeavour to sustain them; if they are too vehement, he may somewhat restrain them; but always modestly and reverently. "Laissez faire" is ever the motto of this school. The favorite measures of the expectant physicians are—pistans, emulsions, gentle alteratives, salines, placebos; they lay great stress on diet and other hygienic agents, their chief object being to place the patient in circumstances as favorable as possible to the sanative operations of nature.

The opposite system is the *medicina perturbatrix*—a method of active interference, engendered by a want of confidence in the ability of nature to conduct the patient to a safe termination of his disorder, perhaps even by suspicions that her intentions even are by no means to be trusted; and that as often as not, she means to extinguish instead of fanning the flame of life. To a physician of this way of thinking, it seems that almost any change is better than the present state of disease, and he resorts to the most powerful artificial agents on the economy, preferring that the patient should die of the remedy rather than of the disease. With such practitioners, the lancet, blood-letting, evacuations, and revulsives in some cases, or powerful stimulants and narcotics in others, are the weapons most in use.

These are on either side extreme opinions, and not only extreme but exclusive, and as such erroneous. To look fixedly in one direction, and because truth is seen, to refuse to turn the eyes in another direction, and not only so, but to deny that truth can lie anywhere in the universe but on the very spot contemplated, is to err (if the phrase be not a solecism) from the want of discursiveness. Those who do not regard the processes of disease in so partial a manner, may readily discern two different tendencies, one to reparation and health, the other to destruction and death; nay that the very same vital action which in one situation may be most salutary, in another may be just as pernicious. The effusion of fibrin, which, in a external wound, restores the continuity, may on the surface of the intestines produce fatal entanglements, on that of the heart may embarrass the organ for the remainder of life, and in the air-passages become literally a fatal obstacle. The formation of pus in the liver may seem to have saved the patient when the abscess has pointed through the parietes of the abdomen, or through one of the mucous outlets, but the same process is mortal when the matter escapes into the peritoneal cavity. There is strong reason for surmising that death was contemplated by the Divine Author of our being, as the result of our constitution no less than the continuance of life, and that disease is one of the many means intended to accomplish the former of these purposes. If organic processes are so adjusted that they assist each other, that they recover from disorder immediately on the removal of the disturbing cause, and that fatal disease in one part is prevented by a morbid state supervening on another part; it is no less true that at other times these processes interfere with each other, that they persevere in morbid action, and that the occurrence of disease in a part of trivial importance will be the occasion of serious mischief in a vital organ; that, in short, if on the one hand we observe harmony, reparation, and salutary revulsion, on the other we cannot

shut our eyes to the existence of discord, destruction, fatal sympathy, and metastasis. Were we disciples of Zoroaster we might recognise in the human body, as throughout the universe, the sway of two antagonist principles, a good and an evil. The *vis medicatrix* is opposed by what I have been accustomed to call a "*vis vitiatrix*." On contemplating these forces the practitioner may exclaim, "Non nostrum inter vos tantas componere lites."

But his duty is not that of an arbiter; he must be a steady partizan of the one—the deadly foe of the other; the difficulty is to be discreet in his aid; if he interferes rashly and unadvisedly he may thwart or even injure the very party he is anxious to abet. We have to study closely the natural course of maladies as to this very point; if it appears that the tendency to recovery is very marked, we should be foolish to interfere. If, on the other hand, it has been ascertained that cases left to themselves, or but little meddled with, more frequently end in death than in recovery, it is our plain duty to make trial of remedies, even though of the most doubtful description, on the old maxim, "*anceps remedium melius quam nullum*." In many cases of continued fever the practice may be expectant, in local inflammations it can rarely be so with safety; yet in both instances circumstances may arise to change the plan of treatment. In the fever a local disease may be set up requiring the most active exertions of the physician, such as an intestinal hæmorrhage depending on follicular ulceration, and requiring the bold exhibition of some of our strongest medicines. Again, in the other case, the inflammatory process may be undergoing spontaneous cure by the increase of a natural secretion, and here the *nimia diligentia medici* might be as dangerous as inaction in the former instance. In brief, almost every case that comes under treatment requires the practitioner to be constantly on the watch, to determine not only how to interpose the aid of art, but when to do so.

In the practice of medicine my advice to you is to aim at being eclectic; do not be enticed into the notion that to be eclectic is to have no decided views, or, in other words, to be blowing hot and cold. If you care rather to save yourselves trouble than to do your duty towards your patients, you will find it unquestionably easier to take up with one exclusive system of pathology and apply to it one system of therapeutics. Individuals of great genius and vast knowledge have fallen into this error, as I shall have hereafter to point out to you; and when men have been the authors of useful discoveries we may make allowances for their having over-valued their own productions and fixed their minds too exclusively upon them; but we must not permit ourselves to be misled, and to adopt their errors, because it saves us the trouble of viewing other facts and doctrines. One cardinal maxim let me urge upon your adoption; suspect the truth of any therapeutical system of great simplicity, and the more so if propounded by one imperfectly acquainted with the fundamental departments of medical science; be certain that when anatomy and physiology are every day exhibiting more and more strongly the infinite complexity of the normal structures and functions, pathology and therapeutics must be proportionally composite. Take no account of what is called the overwhelming testimony to the effi-

cacy of these simple methods when offered by uninformed observers. Such has been offered in favor of the most absurd and dangerous forms of quackery that have ever been propounded. If the testimony refer only to a single remedy for a single disease, or for a particular method for such disease, you may listen to and weigh it carefully, remembering that many remedies have in the first instance been purely empirical; but when the one remedy or plan of cure is to be applied to many and divers diseases, having little or no affinity with each other, you may safely dismiss it from your minds.

Let me, however, again recommend to you the eclectic method. Be not exclusive in your rejection of methods any more than in your adoption of them. How unwise would it be to forego the advantages of the stimulant treatment once so universally applied by the Brunonians, or of the bleeding of the Broussaïsts, or of the blue pill system of Abernethy, or of the "beefsteak and porter" practice of others, merely because the indiscriminate use of such measures has led to deplorable failures in practice. Each of these systems is good in the right place; "nullum in remedium quin solo tempestivo usu tale fiat."

I would advise you even not to disdain taking a hint now and then from the practice of heretical professors, if you can turn it to account, for the good of your patients; for in most of the heresies in medicine, as in philosophy and religion, there may be detected a portion of truth, though overlaid by a mass of absurdity and error: to instance, two systems at the present time very popular, though one has passed its meridian of favor, and the other is in the ascendant—I mean homœopathy and hydropathy. The former of these has two grand principles—one, that diseases are cured by substances which produce such diseases, "*similia similibus curantur*," as bark is said to cure ague, because it produces ague in healthy persons (though I confess that, in a pretty large experience of the use of this drug, I never saw any such effects); or as diarrhœa is cured by purgatives, &c. The second principle is, that these substances must be given in infinitesimal doses, and that, in the trituration and agitation essential to such minute subdivisions, new powers are developed. Now, to the first of these principles much exception may be taken though there is an apparent plausibility in it. The artificial action is not the same, though somewhat like. The evacuations produced by the purgative that cures a diarrhœa are very different from those that constituted the latter, and argue a dissimilarity in the states of the membranes that furnished them. The inflammation produced in the eye by nitrate of silver is different in character from the inflammation which it is so useful in removing. Still something may be learned from the facts adduced in support of the dogma; and it is that, inasmuch as certain substances do produce a morbid change in certain organs, and that change is not only often subversive of spontaneous disease, but also itself easily removable, we may with benefit make use of such substances. Often the difficulty in practice is to find a substance that will act upon the part which we deem the seat of disease; but the discovery of one that induces an effect like the disease, shows that we have a substance likely to answer our purpose, of engendering in the

seat of disease an artificial evil that may supersede that which is spontaneous. As to the other principle, I have no hesitation in saying that I utterly disbelieve it. No *a priori* evidence has been adduced in favor of it; and if my faith is to be obtained only by trying experimentally whether the decillionth of a grain of opium does or does not produce its reputed effects, I must remain a hardened infidel. To such egregious absurdity I say, "*Incredulus odi*." But what, you may ask, is to be made of the apparent homœopathic cures? Simply this, that the expectant or *laissez-faire* method is in this system carried out to the fullest extent. The natural tendencies to recovery have their full play, and are often aided at once by the suspension of meddling treatment, and by the judicious regulation of diet, the latter being all the positive operation of the homœopathic system, the rest only negative.

The fashionable hydropathy or hydriatics imported from Silesia consists in a vehement and universal employment of cold water, both internally and externally—the extended use of a remedy familiar to every well-informed practitioner. Perhaps something may be learned from this system as to the mode of applying the remedy; but one cannot help being amused with the pretensions of the hydropathic system, which is to overturn all other methods of cure, and to place the art of medicine on a new basis. This announcement would be startling did it emanate from persons acquainted with the structure and functions of the human body in health and disease; but issuing from persons devoid of this knowledge, we must receive it with a good-humored smile, and regret that these sanguine encomiasts have so much disappointment to encounter.

That cold water, in the form of the shower-bath, or cold sponging, or the plunge-bath, is an efficacious tonic, nine-tenths of the practitioners in this country are daily impressing on patients who require such means; and that it is an efficacious auxiliary in repressing certain inflammatory and hæmorrhagic diseases, is at the present moment experienced by the hundreds of sick persons who are ordered by their physicians to have cold cloths on their scalps in meningitis, to swallow iced drinks for cynanche, or gastritis, or hæmatemesis, or hæmoptysis, to have pails of cold water emptied over the abdomen for hæmorrhage after parturition, to dip into cold hip-baths for menorrhagia, or to keep their wounds wet with cold water dressings. If you have to learn how and when to give such directions you may find abundant instruction in the classical work of Dr. Currie, in the treatise on cold by M. Beaupré, in an admirable article on bathing by Dr. Forbes in the "*Cyclopædia of Practical Medicine*," and in many other practical works with which medical literature is adorned. Even from so old a work as that of "*Mercurialis de Arte Gymnastica*" you may glean much useful information respecting the application of cold water for hygienic purposes. It cannot be questioned that the mere ingestion and subsequent elimination of large quantities of liquids often produce most beneficial results; and their utility may be traced, as Dr. Holland has well shown, to "first, the mere mechanical effect of a quantity of liquid in diluting and washing away matters, excrementitious or noxious,

from the alimentary canal; secondly, their influence in modifying certain morbid conditions of the blood; and thirdly, their effect upon various functions of secretion and excretion, and especially upon those of the kidneys and skin." (Med. Notes and Reflections, p. 316). For obtaining knowledge of this kind, then, we have no need to depend on the inspirations of the heaven-born peasant-physician of Graeffenburg. In applying this epithet to Vincent Priessnitz, I have no wish to reflect upon his lowly origin, well knowing how many lights of science have sprung from the humblest ranks of society; but it is proper to remind you that he who is proclaimed as the great reformer of medicine is still a peasant—an uncultured, uneducated man, so far as medical knowledge is concerned.* I have reason, however, to believe that this individual is endowed with great natural sagacity, which is in no respect shown more remarkably than in his selection of favorable cases for the water cure; many invalids he rejects as unfit subjects for the process, and in so doing manifests a proper discernment. How many, alas! of the cases which daily require the anxious care of the ordinary medical practitioner must be rejected, were they capable of being transported to a water establishment!

I must not omit to remark that the treatment called the water cure, when carried fully out for a long time, often produces boils, ulcers on the skin, and the hydriatic doctors consider these eruptions as critical, and effecting the elimination of morbid humors; but we can more readily account for them as resulting from the chronic congestion, inflammation, and suppuration ensuing on the assiduous application of cold water. Such effects on the skin are often produced in the thinly clad members of the community by mere exposure to the inclemencies of the atmosphere. The counter irritation is, no doubt, in many of the cases alluded to very beneficial, the sores in question having the same curative influence as our more orthodox issues and setons. Perhaps the powerful and long continued excitation of cutaneous capillaries under the sudorific part of the water cure may have something to do with the eruptions alluded to.

If we are curious to investigate the circumstances to which hydropathy owes its great popularity, it will probably be found that the following are some of the principal causes:—First, the system is very simple—diseases may be manifold, but the remedy is single, though variously applied; second, the universal applicability of the remedy seems to harmonise with its universal distribution over the face of the globe; third, the system dispenses with the use of drugs, most of which are disagreeable, and many not a little dangerous; fourth, it gives ample employment to the superabundant energies of many of the invalids who seek its aid—physicians are often at a loss in recommending interesting occupation to the hypochondriac, to whom nothing is interesting but what has reference to his health; fifth, diaphoresis or sweating, which is one of the great results of the system, is in much favor with invalids. Whether from the additional notions of bygone pathology, or from instinctive feelings (I suspect the former), patients always attach great importance to perspira-

* Mr. Claridge states that he doubts whether Priessnitz knows on which side of the body the liver is situated.

tion; doubtless this is really one of the most advantageous results of the process. I know a gentleman who for many years has had the greatest difficulty in procuring action of his bowels, and to him the sudorific process of the water cure has been obviously beneficial in compensating the alvine deficiencies. Lastly, the outward use of cold water allays many disagreeable sensations, and at the same time the feeling of glow or reaction gives the idea of an invigorating effect often far beyond what is really imparted. Multitudes of patients of the neurotic class find the sensations attendant upon cold water a pleasant exchange for the anomalous and often distressing feelings which haunt them when their minds are not otherwise occupied—such are dysæsthesia and dysphoria in their various forms; moreover, the use of cold water begets the desire of its repetition. Every one who has accustomed himself to plentiful ablutions of cold water, when debarred from their use feels all the annoyance consequent on the loss of a stimulus. He may fancy that what he experiences is owing to an accumulation of what ought to be removed from the skin, but the time, the lapse of a day for instance, is often too short for any such effect. The real cause I believe to be the privation of the accustomed excitement of the cutaneous nerves and vessels. This fact gives, I think, a ready clue to the explanation of the perseverance with which hydropathic patients often follow up the system—"increase of appetite hath grown by what it feeds on."

As I began with observing, some useful additions to practice may, no doubt, be gathered from the observation of the peculiar methods adopted by the hydriatic professors; but eventually, after the present popular excitement has passed away, cold water will, like all other remedies, find its proper level; it will be known as a valuable expedient in certain diseases, and under certain circumstances, many of which are yet to be learned. The supposed universality of its powers, as I have just remarked, is one of its chief attractions at present; and when that has been disproved, as it surely will be, there is ground for fearing that the remedy will sink in popular opinion to a degree which will be the exact measure to its present undue elevation. The dyspeptic, the hypochondriacal, the nervous, and the victims of ennui and satiety, as they at one time invoked the mysteries and mummeries of mesmerism—at another swallowed, at the bidding of an empiric, hundreds of vegetable pills—or at another flew for aid to Wildbad, and Baden Baden, and Schlangenbad, and were disappointed—will now not unnaturally appeal to hydropathy, and perhaps with some better success. But the subjects of fevers, exanthemata, and acute visceral inflammations, the unhappy sufferers from organic diseases, and those who have been broken down by hæmorrhages and exhausting discharges, and those who require the skillful knife of the surgeon—all, in fact, who are in direct need of the remedial art, will, we venture to say, remain adherents of the practice which has been built upon the confirmed observation of disease for successive centuries, and upon the accumulated improvements which every year had added to the knowledge of the human body in health.

You will probably hear these subjects adverted to in general conversation, and as medical students you

may be appealed to. Let me advise you to avoid expressing anything like annoyance at the vaunted success of these extra-professional therapeutics, lest it be supposed that you are influenced by interested motives. On the other hand, you will avoid assenting to the views, however plausibly stated. Content yourselves with stating that you cannot receive a theory of disease and cure from persons who have not studied anatomy and physiology, and that as for the alleged success of the method, before you trouble yourselves to account for it, you must be assured that the persons who witnessed the cures were capable of ascertaining that the alleged disease had really existed.

I have made frequent use of the word systems, and I shall often be obliged to use it. Systems may in process of time lose their value, but we cannot do without them; they are like formulæ in matters of faith; without such connecting tissue our ideas would fall loosely about and be lost. True, these systems are often artificial—idols or imaginary embodiments of our minds which we mistake for realities; but it is better that our knowledge of facts should be thus held together, even though the respective position of the members of the system and the cement which unites them must often be altered and softened by time. It is not, however, so with all systems—those, for instance, which are copied from the actual order and arrangements of nature. Why, you might at first sight ask—why should there be any systems but such as are directly derived from nature? The answer is, that the natural order and collocation of facts are often not easily ascertained. It may take ages of patient investigation even to prepare the way, before the genius of a great discoverer, even though gifted with those extraordinary insights and inspirations which are not vouchsafed to ordinary men, can see through the perplexities and intricacies in which the true nature of things has so long been involved.

Do not allow yourselves, from observing the varieties of opinion, and the inconsistencies, and transitoriness of systems, to pass into a state of scepticism, and to doubt whether in medicine there be any sound theory. Be assured that in medical science there is that which he who runs may read, there are lights which are not *ignes fatui*, there is ground which will not sink or recede. Read the immortal works which our medical literature can boast of, and you will find that nature presented the same facts to the eyes of the earliest observers as to ours, and that many of the landmarks which guided them may also be ours. Well might Hufeland remark, "There has ever been an invisible church of true physicians who have continued faithful to nature, have been animated by her spirit, have acted under her direction, and kept the sacred watchword—men who have all thought and meant the same thing, who have always been and always will be understood throughout all ages, and in spite of the confusion of tongues; there have always been men in these respects like Hippocrates, Cælius, Aræteus, Baglivi, Sydenham, Huxham, Boerhaave, Frank, and others."

With the enumeration of these illustrious names I terminate my lecture; for they cannot but inspire in your minds high and ennobling thoughts, which I should be sorry to incur the risk of dissipating by any further remarks.

HÆMORRHAGE

FROM

EXTRACTION OF A TOOTH.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The following case occurred to me in practice a short time since, and I forward it you for insertion in your Journal, if you deem it worth notice.

I remain, Gentlemen,

Your obedient servant,

ALFRED CRABB, M.R.C.S.L.

Poole, October 15, 1842.

J. O., a young man about twenty-two years of age, of unhealthy aspect, but with the muscular system well developed, and who followed the business of a carpenter, applied to me early one morning to have a tooth extracted. I examined the mouth, and found the tooth which had given the individual pain, and the one to be removed was the first molar of the lower jaw, on the right side. The tooth was removed with facility by the aid of forceps, and the man left the surgery, there being at that time not more hæmorrhage than is ordinarily observed after extraction of a tooth. About four hours after, when I returned home, after making visits in the town, I found the individual for whom I removed a tooth in the morning so early, sitting in a chair in the surgery, and blood issuing freely from the mouth. He told me that, shortly after leaving me in the morning, bleeding came on, and had continued ever since. I added a little sulphate of zinc to a tumbler of cold water, and directed the mouth to be rinsed freely; I then removed any coagula that existed in and around the socket, and filled it firmly with lint saturated with *sp. terebinth.*; a piece of cork was then wedged on the lint and between the posterior bicuspid and the second molar; I bound the lower jaw to the upper, and directed my patient to go home and remain in bed for the rest of the day, all hæmorrhage being at that time arrested.

About four o'clock in the afternoon of the same day I was sent for to see him at his house; I was absent from home at the time, but was shortly after in attendance, and found him, to my surprise, below stairs, and sitting near a fire, with the bandage loose, which enabled him to open the mouth, and hæmorrhage going on. On expressing my surprise at finding him below stairs, he stated that he retired to bed according to my direction, where he remained an hour or two, but, as there was no bleeding, he thought he might get up. I removed the bandage, and on making an examination, found the cork loose in the mouth, and some of the portions of lint gone. He was now placed in bed, and directed to rinse the mouth, and I again filled the socket by replacing the tooth; and, with a view of keeping up pressure, I placed a piece of cork, which not merely covered the crown of the tooth, which had been removed, but extended over other teeth anteriorly and posteriorly; the lower jaw was again bound to the upper by the aid of a bandage, and cold applied over the whole of the side of the face and neck. Hæmorrhage having again been checked, I did not consider it necessary to remain with him, but left directions with his at-

tendants to call me if bleeding returned. Some hours after, and about eight o'clock in the evening, I was again summoned to attend, when I found the blood issuing from the mouth, and running down the pillow of the bed. The apartment was heated, and several persons were in it, who, I had reason to know, had been talking to him, and the effort made to reply to their questions had, without doubt, loosened the bandage, which allowed the cork to shift its position, and the tooth to rise considerably in the socket. I now let him wash the mouth out freely with cold water, whilst the bedstead in the adjoining room was divested of everything except a mattress, over which a sheet was placed, and my patient was carried into this apartment, which was well ventilated, and placed on the sheet covering the mattress, and just a sheet thrown over him. All visitors were now excluded except one female attendant and myself. The skin being hot and feverish, and the pulse 96, full and bounding, I prescribed the following draught every half hour:—

Alum, one scruple;
Dilute sulphuric acid, twenty drops;
Tincture of digitalis, fifteen drops;
Water, one ounce;

and directed an assistant to keep up pressure on the lint (with which the socket had been filled) by the aid of a finger. On visiting him, about two hours after, I found the pulse and heat of skin subdued, but he complained much of nausea. The hæmorrhage was to a certain extent subdued, but not to such an extent as to induce me to relax my efforts. Sickness having supervened, I discontinued the medicine, and all previous means proving of little avail, I determined on applying the actual cautery. Having obtained an instrument from home (within five minutes' walk), and such an one as is ordinarily used for destroying the sensibility of the nerve in some decayed teeth, I heated it, and applied it to what appeared (as far as I could see by candle-light) the part from whence the bleeding came, but hæmorrhage appeared but little arrested. I waited a few minutes, and re-applied it, and certainly it then appeared with some effect; but I quickly found that hæmorrhage was still going on to such a degree as would not warrant my leaving my patient, or discontinuing remedies. In this predicament I scarcely knew how to act; it was now past midnight, but I ventured to hope that, as the hæmorrhage had been partially arrested by the actual cautery, perhaps pressure might do the rest. I, therefore, procured a piece of sponge, and having cut it into small pieces, directed an assistant, who was then called in, to draw back the right angle of the mouth, the female before mentioned holding the candle. I placed in the sponge very gradually, and made pressure as I went on (with an instrument used for pressing gold into decayed teeth), especially on the anterior and posterior part of the socket, and having filled the cavity level with the upper part of the gum, I placed on the sponge a *thin* piece of cork, and then wedged with *considerable force* a piece of lead—taken from a window-frame—on the cork, and between the adjacent teeth, which happily succeeded in again putting a stop to hæmorrhage, and I left my patient, with directions to one of the attendants to sit by him during the remaining portion of the night,

and at the same time gave strict orders that he should have no more clothes allowed him, and that no one should speak to him after my leaving him. I heard nothing more of him during the night, and on visiting him the following morning, found no hæmorrhage had returned, and that he had slept some time. He continued in bed a couple of days, taking cool and bland diet, at the termination of which time the cavity was emptied of its contents, and nothing farther occurred worth notice to prevent recovery.

My patient told me when he came to the surgery, after having had the tooth extracted, that he had only had one previously extracted, which was performed by a female in some neighbouring place where he was then living, and that bleeding then came on to such an extent that a medical man had great difficulty in arresting it.

A CASE OF HEMIPLEGIA TERMINATING IN COMPLETE RECOVERY.

By BEVERLY R. MORRIS, A.B., M.B., Trin. Col. Dub.
Physician to the York Dispensary.

February 8, 1841. Mrs. T—, aged sixty, of a spare habit, was seized yesterday about four, p.m., with a total loss of power of the right hand and arm, and with some loss of power over the leg of the same side. She had no previous headache, or warning of any kind; the bowels had been regular.

Present Symptoms.—Eyes natural; face rather anxious; tongue foul, with white fur; bowels slow; pulse 80, moderately full and soft; no headache; right arm entirely without power of motion; sensation remains perfect; hand red and swelled; tongue protrudes slightly to the right side; right leg drags, but is somewhat under command; utterance thick; slight tenderness over lower cervical vertebræ. A blister between the scapulæ; cupping glasses over the scapulæ.

Calomel, two grains;
Scammony, three grains;
Jalap, four grains;
Capsicum, two grains. Two pills to be taken at night, and half an ounce of sulphate of magnesia.

9. Tongue cleaner; bowels moved freely; utterance somewhat improved; swelling of hand less; in other respects as yesterday; blister has risen well. Repeat the pills and the sulphate of magnesia.

12. Each day some very slight improvement in the tongue and right leg; swelling of hand gone; no power over the hand or arm yet. Each day the pills and sulphate of magnesia have been repeated; continue remedies.

14. To-day she can very slightly move the arm by the muscles of the shoulder-joint; leg better; tongue still deviates a little to the right side. Continue treatment.

15. To-day can move the forearm with the biceps; no motion yet in the hand; in other respects as yesterday; is cheerful. Continue remedies.

16. Can pronate the hand when it has been supinated; leg better; in other respects as yesterday.

17. Can both pronate and supinate the hand; leg

better; seems going on very well. Repeat the blister, and continue other remedies.

18. Can flex the fingers a little, but cannot extend them; tongue protruded nearly straight.

19. Can both flex and extend the fingers a little; tongue almost straight; blister has risen well; metallic taste in mouth. Omit the pills; continue the magnesia.

21. Going on very well; complains of soreness of mouth; motion in arm considerable. Friction of the arm to be practised.

March 20. She went on so well that I omitted all medicine till now, when the arm appearing to be still a little deficient in power, I ordered extract of nux vomica, half a grain twice a day. This she continued for a fortnight with very decided benefit, as by that time she had entirely regained the use of her hand and arm.

October 10, 1842. She has continued quite well up to this time (eighteen months), and does not appear to experience any ill effects from the attack.

REMARKS.

I have not brought forward this case with the view of propounding any novel ideas as to the pathology or treatment of the disease, but simply as a case of a usually rather intractable disease resulting in perfect cure. There can be no doubt that hemiplegia is very closely allied to apoplexy; yet the same active treatment so essential in apoplexy is seldom called for or justifiable in hemiplegia. Bleeding from the arm is seldom to be had recourse to except in cases where general plethora or a particular determination to the head exists. Cupping and blisters to the back of the neck will usually be found sufficiently active. Free purgation is also a very essential part of the treatment, and is generally indicated by the constipated state of the bowels. Calomel will also be found very beneficial in most cases, but it is not necessary to push it to salivation; indeed its alterative effect should be rather sought. If to this we add stimulation to the extremities of the nervous filaments by friction, we shall have enumerated nearly all the remedies most to be relied on. In this case the nux vomica was ordered, and certainly seemed to be of use; but generally I have not seen much good result from its exhibition. The way in which the power returned first to the portions of the nerves nearest their source, and slowly and by degrees to their more distant extremities, is interesting. The tenderness over the lower cervical vertebra would lead one to suppose the seat of the disease to have been there, but this I think is by no means certain, though probable; and, indeed, this induced me to apply the local remedies to which I had recourse at that spot, and with seeming benefit. If this was a case of spinal hemiplegia, as I am inclined to believe, the affection of the tongue and leg are easily accounted for, as we know that the effects of a slight injury would be felt more in its immediate neighbourhood, and less at a distance; and the more severe it was the greater distance would its injurious consequences extend; and this I conceive to be a rational explanation of the symptoms which occurred in this case. This subject might be pursued much farther, but I feel that I have already occupied as much of your valuable columns as I could reasonably expect to be allowed me.

AFFECTION OF THE COLON.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The late Dr. Holland entertained the opinion that the functions of the colon were peculiar, and that they exercise a much greater influence on the animal economy than has been generally admitted. My own experience and observations on the phenomena of some diseases induce me to coincide with this excellent physician; and my attention has been, since reading his opinions, more particularly directed to them; and I beg to place at your disposal the following case, selected from many on account of its brevity, from the very formidable and complicated symptoms, leading apparently, and I have good reason to believe, to phthisis pulmonalis:—

June 22, 1841. Grace Barrow, aged twenty, a fine, robust, healthy-looking young woman, has been dreadfully afflicted with headache for thirteen years, and twelve months since it was so intense that she was obliged to leave her place, and has remained at home to the present time, a burthen to her poor parents, who have a large family. When she was seven years old she had ague with headache, and although the ague left her, the headache remained, and has continued nearly constant; but of late, and at present, is so violent that she cannot do her work. She has lived in the families of two or three general practitioners, who have bled her at the arm, had her head shaved and blistered, and given her a great deal of medicine; in fact, it appears that these highly respectable medical gentlemen had paid her every attention, and would seem to have done their utmost to relieve her sufferings.

I find her tongue swelled, and of a blueish cast; pulse natural; she tells me she has no pain whatever except in her head, yet, on making only moderate pressure on the left half of the transverse arch of the colon, she suddenly started and complained of much pain; nevertheless, she was not aware that this part was in any degree affected. I ordered her to rub in half a drachm of the ointment of the biniodide of mercury every night and morning till the part became so sore that she should be obliged to desist, and then to rub in the ointment as often as she could; I enjoined a wholesome diet only she seemed surprised and dissatisfied that I did not prescribe any medicine to take.

July 6. She tells me that as soon as the ointment had made the part sore the headache ceased, and that she has had no headache this week past; she adds, "which is more than I could say these fifteen months past," and, "the disagreeable taste in my mouth has left me." She has no pain on pressing the colon, and she is quite well.

I have never seen her since, but I heard of her (August 2), when she remained well; in August 24, the pain had returned on omitting the ointment, but ceased on its reapplication. On Tuesday last, October 11, 1842, E. C., another neighbour, told me that "she continued better"—i. e. well.

I am, Gentlemen,

Very faithfully yours,

P. S. KNIGHT.

Dorchester, Dorset,

Oct. 15, 1842.

FURTHER.

ILLUSTRATIONS OF THE WATER-CURE,
AS PRACTISED AT MALVERN.

By CHARLES HASTINGS, M.D., F.G.S.,

Physician to the Worcester Infirmary, and Secretary to the
Provincial Medical and Surgical Association.

It is, in my opinion, too much the practice with our profession to allow the mendacious and bold empiric to pass unnoticed. There was a time when medical authority was furnished with powers to inflict condign punishment on such offenders; but that wholesome provision has passed into abeyance, and the quack now stalks abroad, and glories in his security from penal visitation. It is, however, the bounden duty of every physician to discourage empirical practice, not from the sordid consideration of its interfering with his professional emoluments, which is seldom or never the case, but from a firm conviction of the injury the public may sustain by confiding in and employing men who are ignorant of medical practice. The physician should not allow any false notions of spurious liberality to deter him from boldly denouncing every form of empiricism, whether it exists among the regular members of the profession, or among those who may have surreptitiously claimed titles which they do not really possess, for these delinquents always adopt extraordinary modes of obtruding themselves and their wonderful abilities on the notice of the public, and their true position is with the nostrum-mongers. A modern quack may be defined to be—a pretender to knowledge of which he is not possessed—a vilifier of all that is honorable and respectable in the medical profession—and a puffer of some remedy, the powers of which he does not understand.

Now, let us try the water-doctor by any or all of these tests, and endeavour to discover how far his recorded delinquencies entitle him to the unenviable distinction of ranking with some of the most notorious of those medical pretenders, whose deeds are celebrated in ancient and modern times.

Let any one who may be interested in such matters just turn to a certain book, called the "Water Cure," and he will there find that the author of that work has indulged in some most extraordinary assertions, which entitle him to a high degree of celebrity among the fraternity with whom he must henceforth be ranked.

Certain it is, that nothing which can be said by such an individual can in the slightest degree tend to cast a shade on the brightness of the halo which surrounds the imperishable name of Astley Cooper; and yet, as far as this can be done, it is attempted in the above book, for it is there broadly stated that Sir Astley Cooper had publicly vilified his professional brethren by casting aspersions upon them; but, as this reproach of so honorable and untainted a character cannot be believed without the most undeniable proof, I would ask, in what lecture, or at what date, and in what place, did Sir Astley Cooper say that his colleagues in his hospital treated their patients *infamously*, and tell his pupils that their practice was so *infamous* that he could not bear to go into their wards?

In another part of the same book the reader will find it stated that a physician in Edinburgh, by his medicines, caused cancer in the stomach. Now, I would beg to ask, what are the evidences, medical or

non-medical, that a physician in modern Athens not only could not cure a cancer in the stomach, but had even occasioned it in two instances, and killed both his miserable patients? These are very grave charges, which the author of them should be prepared to substantiate, or he will otherwise be despised as a foul libeller and miserable charlatan. But, vile and detestable as are such odious attempts to sully the reputation of some of the most honored of our noble profession, they are, perhaps, surpassed by the unblushing effrontery and impiety with which the author of the "Water Cure" announces that *henceforth there never need be a death from scarlet fever!*

But attend, gentle reader, pray attend, to the following choice specimen of water-cure physiology:—"Give me," says the same author, "any full-grown individual, and let me act on his system and his brain, through his stomach, with meats and drinks in *small or larger quantity, at my disposal*, and I will make him grave or gay, cheerful or melancholy, reduce him to the depths of despair, or elevate him to a fancied heaven. I will destroy his memory, or make him imagine himself the most miserable man on earth, the most to be pitied, having in his possession everything to make him satisfied. I will make him run or walk, lie in bed without the power of movement, to blaspheme or pray, and, although the best of persons, *LAY VIOLENT HANDS ON HIS OWN LIFE.*"

This precious paragraph forcibly reminds me of the story which that notorious socialist, Owen, tells of himself. When a boy he scalded his stomach with very hot Scotch porridge, and it so sharpened his wit that, in after years, he produced the immortal work called the "New Moral World." Now, I feel certain that, as far as the interests of religion and morality are concerned, this work does not contain a more mischievous paragraph than the one before quoted from the pen of one who, *par excellence*, may be styled the medical chartist of the present day.

Further comment upon such impudent quackery would be vain. One can only remark, that it is difficult to find any specimen more illustrative of empirical writing, and it reminds one of the high tone in which the quacks of the fifteenth century addressed the public; for instance, Theophrastus Paracelsus begins his principal work in these words, "Ye must give way to me, and not I to you; ye must give way to me, Avicenna, Rhazes, Galen, Mesue; ye must give way to me, ye of Paris, ye of Montpellier, ye of Swabia, ye of Misnia, ye of Cologne, ye of Vienna, and whatever places lie on the Danube and the Rhine; ye islands of the sea, thou Italian, thou Dalmatian, thou Arabian, thou Israelite, you must give way to me, and not I to you. The monarchy is mine!"

Let me not, however, detain the reader longer by dwelling on the specimens of bad taste and literary immorality which are to be found scattered in plentiful profusion through the work in question. My more immediate object in this communication is to draw attention to the treatment of a case of gout, which disease is supposed to be specially dispelled by the wand of this celebrated magician. The history is as follows, and I give it in the patient's own words:—

"I went to Malvern on the 16th of August, 1842, and had lately recovered from an attack of gout, and

after getting to Malvern, was enabled to walk about. At the expiration of a week, having taken cold, I felt gout was again coming on, so I sent for the water-doctor on the 22nd day of August. After he had examined me, he treated the case lightly, and said *he would cure me in a few days*, so as to be able to walk as well as he did. He then went away, and sent a man, who put me in a blanket and covered me with a bed, under which I remained four hours and a half, drinking a wineglass of water every quarter of an hour after I began to perspire; at the end of that time the blankets and bed were taken off, and I was wrapped in a cold wet sheet, and remained enveloped in it about seven or eight minutes. I suffered a good deal of pain under the bed, but when I had been there three hours and a half, I began to perspire, and did so profusely. The wet sheet immediately stopped the perspiration, and I was then enveloped in a dry sheet and well rubbed. After this I was told I might either go to bed or take a walk. I went to bed, and had a bad night.

"On the 23rd, in the morning, the same process was repeated, only that I went into a cold bath instead of being wrapped in a cold sheet. After this I was decidedly worse, having more pain, and a very restless, disturbed night.

"On the 24th the water-doctor again sent his man to put me through the same process; but, feeling that my life was endangered by what had happened the day before, I did not go through it. I passed another very painful night, and could not move a limb, or bear to be moved.

"On the 25th the doctor called, and said I must have hot flannels for fomentation instead of the foregoing process; this I accordingly did. All this time I took no apertient medicine, and had no evacuation for two or three days.

"On the 26th I had a tepid bath, and again on the 28th; but, feeling that I was not at all benefited, I did not persevere in anything but the fomentation with the hot flannels. I remained at Malvern until the 6th of September, and the water-doctor saw me about every other day. I was under his treatment for a fortnight, at the end of which time I was worse than when I began, and was taken home to Worcester in a fly, being carried into it from my lodgings at Malvern, and carried from it into my house at Worcester.

"Both myself and wife were very much disappointed, as the water-doctor, after he had seen and examined me, had endeavoured to make my wife believe that he should cure me in a very few days.

"I took no medicines after I came home, and remained in bed for several days, and got slowly better. On the 16th of September I still continued very weak, and Dr. Hastings then recommended me some strengthening medicine, and I have slowly recovered my strength, but am now, the 13th day of October, scarcely able to move at all on crutches, being decidedly worse, and less able to move now than I have ever been before at the same period after an attack of gout.

"Dr. Hastings has attended me in several severe fits of the gout, and I have never on any occasion, under his care, been confined to my bed more than eight days. The last time he attended me was in December,

1840, when I had a very severe fit of gout, and he paid me four visits. I was nearly well in six days, and soon able to walk about and pursue my ordinary avocations."

REMARKS.

Here was a case of inflammatory gout, uncomplicated with any remarkable visceral derangement, subjected to the treatment of the water-doctor, and the patient had, at the end of a fortnight, become so much worse, that nearly every joint in the body was useless to him. I had an opportunity of seeing the gentleman several times, whilst he was under the water-cure, and of watching the progress of the case. The first time I visited him was when he had been under the bed and afterwards enveloped in the wet sheet. I found the pulse about 120, the tongue furred, and the pain, on touching any of the affected joints, extreme. I made no suggestion as to the treatment, but merely watched the issue of events. For four days in succession I found the pulse upwards of 100, and the tongue much coated. The treatment did not seem to have the slightest effect in lessening the frequency of the pulse or diminishing the severity of the pain; indeed, I can state positively that I never saw him suffer so much pain in any former attack. It so happened that I had attended this patient in several former severe attacks of gout, and had always been so fortunate as to relieve him speedily by the ordinary means which are in general use for this disease. The application of leeches to the affected joints was always a part of the treatment, and after relieving the bowels by an active aperient he took diaphoretics and alteratives.

This treatment always succeeded in reducing the pulse, and counteracting the inflammatory action, and he on all occasions recovered more speedily than is customary in severe gout, being well and about in a few days.

But what occurred under the water-cure? The pulse was left uncontrolled for several days, the inflammatory action was not checked in the different joints, and the bowels remained inactive. The consequence was, that the usual results of inflammatory action—namely, deposition of serous fluids and lymph took place, and the joints were thus seriously injured by those unnatural deposits; so that up to the time these remarks are written (nearly eight weeks from the attack) they have not recovered their normal state, and perhaps may not do so for a long time to come, whereby a serious injury is inflicted on the patient. Moreover, the treatment was such as produced considerable alarm; for the clumsy mode of producing perspiration, by putting the patient under a heavy bed, caused intense pain, and produced an apprehension in his mind that the disease might take a fatal termination.

There is another point worthy of remark. The discipline of the water-cure weakened this patient to a great degree; indeed, more so than one usually sees in patients who go through severe discipline from lowering medicines, and this weakness was not easily removed, for it remained a considerable time, and until I prescribed some quinine for him, three weeks after the attack, he did not begin to regain strength.

Some apology seems necessary for having said so much of the former treatment of this patient; but the

only means I had of contrasting the effects of the ordinary treatment of such cases with the water-cure, which it is asserted by the modern empirical sect is a more speedy and safe mode of managing gout, was, so far as this one case is concerned, to bring both modes in strong contrast before the reader, in order that he may himself judge of their respective merits. Having thus far performed a duty, which my position seemed imperatively to demand, I shall be satisfied with the result, and as opportunity serves, and as occasion seems to require, I shall still draw the attention of your readers to other cases, which have fallen under my notice, where the boasted water-cure has signally failed in performing any of those miracles which the infatuated admirers of this system seem to look for from it. Not that I expect by such means to produce any impression on the incorrigible dupes and monomaniacs who are invariably found to lend their support to any new system, however ridiculous; but I make my appeal to the medical profession, and through them to the rational part of the community, at the same time begging that my remarks may not be supposed to disparage the efficacy of water as an *adjuvant* to other means. I only repudiate the absurd notion, that it is the *only remedy* which Providence has placed at our disposal for the alleviation of the pain and suffering of the human race.

That facts decisive of the false pretensions on which the water-cure rests, might be abundantly adduced, were "the whole truth and nothing but the truth" told, is not to be doubted. As I before observed, I shall feel it my duty, should occasion require, to bring other facts before the profession. I say *duty*, for "England expects every man to do his duty;" and I would fain have that memorable watchword recollected whensoever such reckless violations of every thing to be called science, and still more of all which is due to a profession, which a great moralist has left so honorable a testimony to, are unblushingly thrust upon us. I believe it to be the plain duty of every honest man, medical or not, to declare his mind on such a matter as this. Not that he need fear, for "magna est veritas et prevalebit"—that axiom cannot fail; but while it is veiled from the ordinary eye by the dust thrown over it by an artful and a shameless hand, fearful evils are perpetrated on the sick and the suffering; and a body, "nulli secundus" in disinterestedness, is held up as only disturbed and offended for the sake of "filthy lucre." Most sure I am that this imputation, now so ungenerously insinuated, now so impudently affirmed throughout the pages of the strange production, called the "Water-Cure" (for strange, to say the least, it is for any thing professing to be either scientific or humane), I say, most sure I am, that this imputation is utterly without foundation. It is impossible to speak of it without indignation. Let empirics make what promises they will—and let the credulous of whatever rank—*miserabile dictu!* believe them! These are their proper privileges, and I seek not to interfere with any man's liberty. But let both empirics and their dupes "do as they would be done by." Let them, while the one pursue their vocation, and the other are content with its performances, let them leave those who are doing their duties diligently, and at a cost of labor, self-denial, and devotedness, ex-

ceeded by none, to themselves. The medical body is not—is in no degree—chargeable with illiberality, as to any new method of treating the various ills that "flesh is heir to," nor with the covetousness of money, which the author of this production alleges against them. Very thankful, on the contrary, would they be if diseases were more tractable, and patients sooner out of their hands than the imperfection of their art at present permits them sometimes to be. They are, however, doing all which the limited nature of human means allows. They are cultivating their science, and they are practising their art more and more successfully, and with most honorable self-dedication.

To say less than this would be inconsistent with truth. To say for them all which might be said, would be as contrary to their unostentatious principles as to the spirit which, from Hippocrates to the present day, has been their predominant characteristic.

Worcester, October 16, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, OCTOBER 22, 1842.

Among the many changes which the progress of events has recently introduced into the general and political institutions of this country, will be found some which must ultimately give rise to questions calling for careful and prolonged medical investigation. It does not require much prophetic skill to divine that the newly received doctrines relating to trade and commerce, so extensively acted upon during the late session of Parliament, will lead to still more extensive changes of a similar character. Whether it be for good or for evil it is not our province to inquire; but the tendency of these measures is manifestly to the removal of all commercial restrictions, financial and protective. We have heard much, in connection with this subject, of the evils of class legislation, and the principle has been broadly laid down, that in no case are the interests of the whole community to be compromised by the attempt at affording protection to those of a portion, however large and influential that portion may be. Were we inclined to discuss the general merits of these intricate questions, it must be in another place, as the subject, as a whole, is foreign to our professed objects. There is, however, one branch of it which ultimately concerns us, and which we foresee will, before long, force itself upon our notice; and it is for the well-being of no single class of the population only that this should be carefully considered, and that any changes in existing arrangements which may hereafter be thought necessary should be neither hastily nor rashly entered upon. The commercial aristocracy of the country will not long remain satisfied with the concessions already made, and the demand for the removal of financial restrictions will be followed by a similar demand for

a revision, perhaps a total abolition, of the quarantine laws. The subject of quarantine must sooner or later come under discussion, and it is well, therefore, that we should be prepared to enter upon it in an enlightened and well informed spirit. The health and welfare of the community at large are here concerned, and under the plea of eschewing all class legislation, to remove the restrictions, or to remodel them without close and accurate investigation, and without being fully assured that the change would not be injurious, would be indeed class legislation of the most mischievous and fatally injurious description.

The whole subject is one which requires the most dispassionate investigation and consideration. If the present quarantine regulations are injurious to trade and commerce, and we believe no one will be found to assert that they are otherwise, it is to that extent for the benefit of the whole community, as well as of the trading class of it in particular, that they should be remodelled or repealed; but before attempting either, it is incumbent on us to ascertain how far we may with safety proceed. The restrictions now in force are alike insufficient for the objects which they are professedly intended to attain, injurious to the trader, and vexatious to all who are exposed to them; but whether they should be removed altogether, to what extent they admit of relaxation, or in what manner they may be rendered more efficient and at the same time less injurious, are questions which require closer examination than they have yet received.

We are quite aware that the operation of the quarantine laws has within a few years been inquired into with the sanction, if not under the express authority, of government; but without derogating or intending to derogate in the least from the ability of the agent employed, or questioning his integrity, we conceive that any decision founded upon the reports thus obtained would not be satisfactory to the public. The question of contagion is one of such difficulty, involves so many considerations purely medical, and requires for its due investigation such a combination of professional and other acquirements, that in a subject of such vast importance it would be in the highest degree rash to be guided by opinions taken up by any single individual, especially when that individual is deficient in the most important qualifications—a previous acquaintance with the operations of disease on the human frame and the habit of tracing such operations to their causes. It will not be overlooked, also, that certain government commissioners have on other occasions been charged with sifting evidence, retaining such only as suited their own purposes or squared with the views of their employers, and rejecting others to the full as pertinent towards gaining a correct appreciation of the objects of inquiry. The effect of this tampering with evidence has been to generate a wholesome distrust of all one-sided reports, and it must be

kept in view, that in the case under consideration the agent seems to have been expressly retained for the purpose not so much of ascertaining the general truth as for determining a special point. Many of his observations are made more or less in the spirit of a special pleader retained to make his own point good. The evidence on one side is not done justice to; its more weighty points are kept back, the weak points brought prominently forward and assailed, not by argument merely, but by that most efficient, though most unequal, and, to a close reasoner, most unsatisfactory of all controversial weapons—ridicule.

Nothing is easier than to invest the very best cause with an air of ridicule, and when better reasons fail it is no infrequent custom in the practised debater or scribe to seize upon some absurd or inconclusive point, and thus dress it up for the public taste. Take the following as an instance of the application of this principle: "M. Lardoni was the most timid of men; he never visited his patients but on horseback, his harness was wholly of unsusceptible materials, his saddle closely covered with oil-cloth, his stirrups were braided, and his rein made with filaments of the date-tree; he had a huge oil-skin cloak in the shape of a sack, which rose above his head and descended beneath his feet; he was always escorted by four servants, one before, one behind, and one at each side, so that no person could approach him. A thousand other ridiculous precautions were adopted by him; they were all in vain; he was attacked, though for two days after the attack he declared it was impossible it should be the plague; on the third he announced that it was really the dreaded calamity, and died soon after."

The ultra precautions of the unfortunate physician, as *here described*, would indeed be, but for the fatal event, a fair mark for satire, but neither the absurdities of the contagionist, nor the ridiculous point of view in which they are exhibited, afford anything in the way of argument as to the determination of the merits of the question. We may say of the public in general, as Lady Morgan has remarked of the Irish, "you may weep or laugh them out of anything;" but this has nothing in common with that calm and well-founded conviction which should alone be the object of the inquirers after truth. The absurdities, therefore, of the plague physician, together with many other points of a like character, brought forward in a similar style by the author of the "Observations on the Oriental Plague and Quarantine," addressed to the British Association, and other similar writers, may be at once set aside.

Are the real arguments adduced in favor of the non-contagious nature of plague of a more certain character? This is the point which requires examination, and that to which we may take occasion hereafter to address ourselves, should there be any disposition manifested to act upon the statement contained

in the pamphlet to which we have referred. From some facts collected by Dr. Bowring, as well as from what has been observed in other countries, and in reference to other diseases than plague, it would seem that whether a disease be purely contagious, or merely epidemic, there is no surer method of breaking its force than by scattering wide the population. It has been attempted, on the one hand, to turn the knowledge of this fact into an argument against contagion, and on the other, to deduce from it that a system of restrictive quarantine is, even in diseases confessedly contagious, unnecessary, since a more efficient means of preventing the spread of contagion is thus at our command.

Assuming in its fullest extent, however, that we have it in our power so to dilute the virus of plague as to render it inert, what must be the sacrifice of comfort and property, what the hindrance to trading transactions of every description, for such seem to be now the gods of our idolatry, were such a measure had recourse to in the dense and crowded population which encumbers the streets and courts of our overgrown metropolis?—what must be the sacrifice of life before such a measure could be thought of?—and even if imperatively called for, would it be practicable to such an extent as to render it available for the purpose? These are considerations which should lead us to pause before we relax prohibitory measures, or authorise any change which might have the effect of bringing a fearfully devastating pestilence amongst so unwieldy a mass of living beings.

From the tenor of the foregoing observations, it may be thought that we espouse the contagious view of the nature of plague, and that we are averse to all changes in the laws of quarantine. Such an inference, however, would be too hasty, since, without feeling ourselves called upon to express a direct opinion upon either question, all that we are disposed to contend for is, a thorough investigation by competent persons before taking any steps to relax or alter those laws under which we have for so many years been preserved from the visitations of plague. The consequences which might follow the hasty adoption of erroneous views upon this point are of too serious a character to be lightly risked. The observations and statements hitherto brought forward against quarantine regulations, divested of their obvious bias, though they make out a case for farther investigation, are by no means sufficient to authorise the adoption of ulterior measures. Those to which we have more especially alluded are deficient, as having been made by an agent, of great intelligence we allow, but laboring under the disadvantage of want of previous qualification for the task. They have been made also by one whose views on general policy are such as naturally lead, whether advisably or not we profess not to determine, to the introduction of change, or, as it might

be termed by some, of reform. In reference to this point we have recently met with the following remark, made by one who is certainly not deficient in acuteness of observation:—"I agree with Dr. Christison," says Dr. Watson in a lecture on continued fever, * "that the discrepancy which exists upon this (the contagious nature of fever), as upon some other controverted questions, depends in part upon the different constitutions of men's minds and their peculiar habits of thought. Most of the anti-contagionists whom I have known have belonged to that party in this country which advocates what are called liberal opinions in politics and in religion."

Whether this observation be well founded, or otherwise, must be left to others to decide. Should there be any grounds for receiving it as correct, it forms an additional reason for hesitating before the *exparte* statements we have alluded to are, without further investigation by fully qualified and competent persons, adopted as the ground-work of changes in the existing regulations.

The Royal Medical and Chirurgical Society has been recently the victim of a mystification, so cleanly arranged and so happily executed, that we deem it worthy of a passing notice. Our readers have not forgotten Mr. Liston's false aneurysm case at University College Hospital. That case was made the subject of a very elaborate communication from Mr. Liston to the Medico-Chirurgical Society, and the views expressed by the learned writer were warmly adopted by Dr. James Johnson and other surgical luminaries of the same force. The paper was really a very excellent one, and would have made a creditable appearance in the annual volume of the Transactions of the Society. It was rejected by the publishing committee. Mr. Liston, if we are rightly informed, then submitted his paper to a meeting of the general council of the society, who, for reasons best known to themselves, likewise rejected the unfortunate memoir.

A man of ordinary genius would have pocketed the insult and the paper, and forgotten both; but Mr. Liston was born too far north to be done by a cockney council. The volume of Transactions was distributed last week to the members of the Medico-Chirurgical Society, and with each volume Mr. Liston's memoir, printed in the same type, of the same form, &c., and looking exactly like a paper, which, by some mistake, the binder had forgotten to bind up with the volume. In fact, most of the members of the society who received the volume of Transactions, and its rider, viewed, and probably still view, the circumstance in this light. The plan was a clever one and succeeded.

In the next number of this Journal we shall publish the first of a series of clinical lectures now in course

of delivery, by Dr. Watson, at the Middlesex Hospital. We also propose publishing a course of lectures on organic chemistry, in its application to arts and agriculture, by M. Payen, member of the Institute of France.

CLINICAL LECTURE,

DELIVERED IN

THE WESTMINSTER HOSPITAL,

By Mr. GUTHRIE,

Saturday, October 15, 1842.

GENTLEMEN,—I desired last Saturday that notice might be posted up in the hall of my intention to give an introductory this day to my lectures, having refused to permit my name to be placed in the list of clinical lecturers for this season, because I do not choose to promise that which I may not perform. I read in a medical journal, early in the present year, some uncivil observations on this subject, from some one purporting to be a student; my mouth was immediately closed; not one word have you heard from me since. I have, however, now reason to believe that the gentleman who wrote these remarks is not a student, and I do not think it right to punish the innocent for the guilty. I shall, therefore, notice some of these excellent cases, and bring the individual subjects of them before you, who, during the first six months of this year, brought me, almost without an exception, every day to the hospital; and I shall be happy to think that even one half of you paid them only half the attention they received from me.

It appears that some gentlemen wish to run down this hospital, both as relates to the relief the poor receive, and the instruction which students may obtain at it, by inveighing strongly against the management which does and does not take place within its walls. I regret very much that many of the assertions of mismanagement are, in all probability, true as relates to the medical arrangements, several of which are not, in my opinion, fitting for a public hospital in London. They are all of them, however, good, and well adapted for a parish infirmary; and as long as it may be thought right to continue them, the hospital must remain in a depreciated state, both as a place of refuge for the sick poor, and as a school of instruction.

When things become so bad that any change must be for the better, we may hope for improvement, and I care not how soon this takes place, for I confess I shall look forward with the hope that this hospital will then rise from its remains, and assume that character, and obtain that reputation, it never can have under existing circumstances. I have done my endeavour to remove the abuses and grievances of which I am sensible; but I abhor all disputes and squabbling, more particularly when they become personal, and I have no wish to contend with gentlemen whom I personally respect, although I believe them to be in error; and even if I thought it right to do so, I have not the time to spare which the forms of the hospital require.

With respect to you as students, I have not recommended one to come here; I have not invited you in

any way. You have come because it suited your own views, and, being here, I am at all times happy to give you every information in my power. My days of attendance are Tuesdays and Saturdays, according to the rules of the hospital; but you will see a notice in the hall that I also attend on Thursdays, believing that every physician and surgeon should see every particular case three days a-week, and when I have any one in danger I visit him every day. You need never expect me before a quarter past one, and never wait for me after a quarter past two, before which time the assistant-surgeon will go round with you if I should be absent; and whenever he does the duty of one of the surgeons, he ought to receive a regulated proportion of the money which the seniors derive from the fees which you pay for permission to attend.

I am never so contented as when you make yourselves constantly known to me, by obeying my injunctions, so frequently repeated, of walking up to me and repeating your names in my face. I do not desire one word more. When you wish anything from me, you have only to ask it; when you desire to have a clinical lecture on any subject, you have only to show to me that you have yourselves attended to it, by presenting your own notes of the case or cases on which you wish to have my opinion, and your request will always be granted. You have simply to conduct yourselves with order, regularity, and strict attention to what I say to you, and there is nothing I can do that I will not do to serve you; but, as to obtaining anything from me by any other line of conduct, it is not to be done. I have never perceived the slightest mark of personal disrespect to myself on any occasion, and I believe it is the last thing any one of you would think of offering; and as to what idle persons may write in your name, we will not in future give it any consideration. I shall judge of you by what you say and do here, and shall think the better of any young man who comes up to me boldly, but respectfully, to state his wishes or his grievances, even if the complaint be against myself. With respect to the office I hold here, I value it very little as relates to money. There are two or three of the influential governors who know it is at their service whenever they please to ask it; and, in fact, I only keep it because I hope the day is not very distant when I may be able to make my resignation more useful to the profession and to the public than it would be at the present time. I think it exceedingly unfair to the younger men, who are hanging on about an hospital, that they should have no hope of the opportunity of distinguishing themselves except by the death of, perhaps, their best friend.

The governors of the Ophthalmic Hospital at once assented to my proposition, that every surgeon should retire when sixty years' old, and I must retire when I shall have attained that age, although, perhaps, the hospital is indebted to my constant care and superintendence for its existence. I proposed to the governors of this hospital that every physician and surgeon should retire at sixty-five years of age, and they were pleased to make it a law for all such persons who may in future be elected. They spared the present ones, very much against my wishes, and have perpetuated an evil for some twenty, or perhaps thirty, years, which

I hope myself and my colleagues will have the virtue to remove.

When I had the honor of being elected a member of the council of the College of Surgeons, I found regulations existing which had been made many years, requiring an apprenticeship, or studentship, for six years, one only of which was required to be spent in studying surgery in a London hospital, for which year the same sum was paid you pay now, the age for examination being twenty-two. This I considered, with others, a great error, and we applied ourselves so steadily for its removal, that we succeeded in reducing the term of study to four years, the age to twenty-one.

If the young candidate for the medical profession remains at school until he is seventeen, he will, in all probability, have profited considerably by its ordinary instruction, and have gained sufficient preliminary information to qualify him to pass through life without remark, if not with much credit; and I hope the forthcoming Act of Parliament will enable us to secure to all such preliminary education, for I regret to say that among those students who entered the profession some years back, and are only now presenting themselves for examination under the regulations of 1836, there are many who cannot spell very common words in their native language.

If the first years of the professional education of a student were passed in the apothecary's shop of an hospital, or in that of a practitioner, visiting the sick wards occasionally, he would acquire a sufficient knowledge of the making up of medicines, and of the articles themselves, and something of other things that would smooth his path, and remove many difficulties which he would otherwise experience, by going at once to lectures in an hospital. When we augmented the course of surgical study from one year to three, we took care you should pay no more than was expected from you thirty years ago; and the whole amount of fees for hospital attendance, including the practice of the physician as well as of the surgeon, and all the lectures you are required to attend, does not exceed, at this hospital, seventy pounds, and is very little, if anything, higher at any other. You could scarcely learn to black shoes in a fashionable manner, certainly not to make them, for less money. We did more, we considered that if we caused your parents to keep you at school until you were seventeen, instead of sending you into a shop to open the door, and perform other menial offices, at fourteen or fifteen, and thereby incur an additional expense in your education, we might with propriety save them the expense they would incur in your support the last year, and we made the period of examination twenty-one instead of twenty-two. We also removed the great grievance of which so much was made, of confining instruction to the London schools, and enabled a student, who might live in a provincial town, which had an hospital and school competent for the purpose of instruction, to pursue his studies at home, and, therefore, at little or no expense. I always have thought that we who succeeded in effecting these things had done the profession some good service; and I have been surprised lately to see myself accused of doing exactly the reverse. It is true I have not thought it necessary to

enter into explanations on these points. I have, I fear, in fact, hid my light under a bushel. I have now ventured to state the fact, and I trust that those who had previously been misinformed will not feel offended at my correcting their accidental misrepresentation. I will even beg of them to try me in future by a different rule, and whenever anything is done in which I may be supposed to have had a part, in which public justice or the best interests of the public do not appear to be sufficiently consulted, and that private interests have been preferred, to believe that the transaction has not had my support. I am aware that, in causing you to attend an hospital, and to study anatomy for three years, it has been objected, that a horse may be brought to the water, but that he cannot be made to drink, which I do not dispute. I have, however, seen some thousands of horses taken to water, and have always seen them drink, unless they had lately drank before; and I am of opinion that if a young man attends an hospital regularly, he is much more likely to learn than if he should not attend at all. The proof of such attendance is derived from the reports and certificates of the teachers, and if the regulations on these subjects had been duly complied with, that proof would have been complete. The surgeons and teachers of the large hospitals declined to comply, and the college gave way. I need not tell you the regret I felt on the occasion; and I may add, that there is no abuse so great in the profession as the manner in which gentlemen grant certificates, sometimes even of an attendance which has never taken place, and for persons not actually in the country, all, I am willing to hope, out of pure negligence; but the subject is too painful to comment upon, and my only consolation on this point is derived from the belief that these irregularities will, in the course of the ensuing year, be effectually corrected.

With regard to the lectures you are ordered to attend, I am of opinion that every student should be a perpetual pupil to all; but I would not advise a regular attendance on more than one course of each, in order that the student may learn the history of the art and science he is afterwards to acquire a knowledge of by his own labors, under the observation and with the assistance of his teachers.

On the study of anatomy I have much to say, but I have only time to point out to you and to exhort you to avoid the error of learning anatomy in one place, and physic and surgery in another. Nothing can be more absurd than the peripatetic mode so frequently adopted, of walking from one end of this great town to the other to study anatomy, and back again to learn physic. They should both be taught at the same place, so that all the teachers may act together for the good of the student and the public, and where this is not done as it ought to be I would recommend you not to attend.

I have heard it said that it is beneath the dignity of an hospital surgeon or teacher to ascertain whether his students are present or not, and that it is equally derogatory to the character of a student to have a watch set upon his attendance; to which I have always replied that the regius professors of divinity, and others of equal rank, in the universities of Oxford and Cambridge, do not think it unbecoming in them

to ascertain that their students attend regularly, and that hospital surgeons and teachers may do with great propriety what such men as these have done; and whilst the sons of the greatest men in this country are regularly marked off every morning, as they go to chapel in these colleges, and the defaulters noted, medical students of the same age may and ought to readily submit to the same ordeal, which is purely for their advantage.

The inattention shown by many professors with respect to the attendance of their students renders another functionary necessary, who is called a grinder. As the time approaches for the final examination of the student at the College of Surgeons for the diploma, he becomes then sensible of the folly of his conduct in not attending to his studies, and he seeks a gentleman who shall stuff as much information into him in a few weeks as may answer his momentary purpose. Thus crammed, as the term is, he fixes his day to go off, perfectly satisfied that he would forget all he had learned from his grinder in a month, if the grinding were not daily sustained. Under these circumstances young men have frequently assured me they could describe a part or a disease they had not seen just as well as one they had; I have myself heard a student describe very well the biceps flexor cubiti muscle, and not know it when shown to him. Anatomy is only to be learned by dissection, disease by attendance at the bed-side of the sick in an hospital. There is then to be acquired that confidence in your own knowledge which will enable you to manage and subdue a complaint without assistance from your teacher, and which confidence is only to be acquired by experience and observation. Your whole life, in fact, must be one of continued study, and you will at last die having much to learn.

NEWCASTLE-ON-TYNE INFIRMARY.

[*Practice of Sir John Fife.*]

REMOVAL OF TUMOR FROM BENEATH LOWER JAW.

(Report by Mr. John Mitchell.)

Robt. Bowsfield, aged thirty-nine, husbandman, was admitted Sept. 24, 1842, into the Newcastle-on-Tyne Infirmary, under the care of Sir John Fife, with a tumor beneath lower jaw.

He states that he had quinsy about fifteen years ago; after he recovered he found a small hard knot about the size of a bean close below the ear on the left side, and he was unable to open his mouth as wide as formerly; he took little notice of the circumstance, as it gave him little uneasiness; the tumor remained nearly stationary for eight years (but whenever the patient caught a cold it was always a little larger); it then began gradually to increase, and continued to do so up to the present time; during the last six months, however, the growth of the tumor was more rapid than at any other time. Has had little or no medical treatment, except about five years ago, when it was blistered, and iodine ointment was rubbed in; he persevered in this treatment for two months without the least benefit.

Symptoms on Admission.—The tumor is of a large size; it extends from opposite the external meatus of the ear on each side, backwards upon the neck, forwards on the side of the cheek, and downwards to within two

inches of the symphysis menti. It is of an oval figure, smooth and round on the surface; the color does not differ from that of the surrounding parts; it is movable to a great extent (and he thinks it has become much more so within the last two years); it does not appear to be fixed to the ramus of the jaw; it is firm, and seems slightly attached above the angle of the jaw; it occasions considerable inconvenience during mastication; the patient cannot open his mouth more than an inch; he experiences great uneasiness, with pain in the head whenever he stoops. Bowels open; pulse good; tongue clean, and in every other respect he is in the enjoyment of good health and spirits.

Sept. 27. *Operation.*—The patient was seated on a chair, and leaned obliquely on a table. An incision was made from the mastoid process to the chin, and the integuments turned upwards; another incision, commenced near the centre of the first, was continued downwards till it intersected without opening the external jugular vein; the dissection carried under the base of the tumor then exposed the mastoid muscle, internal jugular vein, and sheath of carotid; the portio dura of the 7th was divided, and a small part of the parotid gland, which was indurated and attached to the tumor, was removed along with it; six arteries required ligature; the integuments were brought together by suture, and covered with lint steeped in cold water. The patient evinced great fortitude; the structure of the lower and anterior part of tumor proved fibrous; that next the parotid was much more indurated, presenting the radiating lines observed in scirrhus formations. Weight, nine ounces; largest circumference, eleven inches. He was ordered to have an opiate at bed-time.

28. Has passed a good night; slight pain and stiffness in wound; no thirst; bowels open.

29. The wound was dressed this morning with lint steeped in cold water, and the compress was kept constantly wet; good deal of swelling in lower part; mouth twisted a little to right side; bowels confined. To have an opening draught. The power of feeling in the cheek is not so perfect as on the sound side.

Oct. 2. Dressed again this morning; doing remarkably well; swelling in cheek much abated; suppuration healthy; bowels open.

9. Has gone on since 2nd without a bad symptom; the ligatures were removed this morning; wound quite healthy; mouth still twisted a little. Convalescent.

ONYXIS.

The diseased lateral growth of the nail of the great toe, when it presses into the surrounding soft parts, and causes a fungous granulation to spring forth, is nearly as painful as the operation usually adopted for its cure. M. Payan, the principal surgeon of the Hotel-Dieu, at Aix, in an essay on caustics, which recently gained the prize offered by the proprietors of the "*Bulletin de Thérapeutique*," advises the application of the Vienna paste to that portion of the matrix of the nail, which corresponds to the part involved in the vicious growth. The adjacent parts are to be protected by adhesive plaster. By the destruction of the matrix, the reproduction of the diseased nail is prevented. The Vienna paste is the potassa cum calce, prepared with six parts of quick lime and five of pure potass.

RETROSPECT OF THE MEDICAL SCIENCES.

THE INFLUENCE OF THE CORONARY ARTERIES ON THE ACTION OF THE HEART.

Dr. Marshall Hall in his Gulstonian lectures for the present year, speaking of the causes of sudden death, attributes it in many instances to an interruption of the coronary circulation. He thinks that ossification of the coronary arteries, a fatty condition of the heart, a contracted aortal or deficient mitral valve, may, by interrupting the flow of blood through the coronary vessels, give rise to syncope or sudden dissolution, according as this is more or less imperfectly impeded; and that when entirely arrested, the heart, being suddenly paralysed, may have its action stopped for ever.

To determine the effect that the arrest of the coronary circulation would have upon the action of the heart, Mr. Erichsen performed a series of experiments on dogs and rabbits, seven in number. The animals having been pithed, the heart's action was sustained by artificial respiration, the chest opened, the coronary arteries and veins tied, and the subsequent duration of the ventricular pulsations noted, which, with the exception of the second experiment, gave an average of twenty-three and half minutes after the application of the ligature, while in an animal that has been pithed, and the heart remains intact, artificial respiration will keep up the cardiac pulsation easily for an hour and a half. When the coronary veins, which are necessarily included in the ligature, are punctured afterwards, so that venous congestion of the muscles of the heart does not exist, the action of the organ does not continue so long.—*Medical Gazette*, July, 1842.

ENLARGEMENT OF THE HEART FROM RHEUMATISM.

Mr. Lawrance details the case of a boy, fourteen years old, the subject of acute rheumatism, who was also laboring under evident hypertrophy of the heart. This last named affection was first perceived in January, 1830. On the 10th of December, 1831, he was again seized with rheumatism attended with high inflammatory fever, of which he got better, but a relapse occurred, the heart being attacked, and he died suddenly on the 31st of the same month. On examination of the body, the pericardium was found to be enormously distended, and before it was opened, measured seven inches and three quarters across in a horizontal direction. It contained twelve ounces of bloody serum. It adhered to the heart at the base, and also by vascular productions in other parts; its internal surface was of a dark red color, and covered with rough projecting papillæ, which were also found on the muscular substance of the heart. The heart itself was very much enlarged and hypertrophied, and there was a pendulous fleshy projection of a cartilaginous hardness, nearly an inch long at the upper part, near the origin of the left auricle. The organ was highly vascular, and on opening the cavities the interior lining of the auricles and great blood-vessels was found to be of a deep red color. Together with its investing pericardium, the fluid having been evacuated, it weighed one pound thirteen ounces, avoirdupois, the average weight of the heart of an adult male, according to Dr. Clendinning, being nine ounces, avoirdupois.—*Med. Chir. Rev.*, July, 1842.

FRACTURE OF THE SPINE AND STERNUM.

Three cases of fractured spine, the sternum suffering by contre-coup, are recorded in the annual surgical report of the Hotel-Dieu, published in the "*Gazette Médicale*." In each of the three cases there was complete separation of the first bone of the sternum from the second, the latter having passed up in front of the former, and causing a considerable projection. The organs of respiration and circulation were unaffected. These cases of fracture, with the exception of those recorded by David and Chaussier, are unique. A painter, while engaged at work on the walls of a church, fell from a height of twenty-five feet, the body in supination and across, on to a bench; there resulted fracture of the fourth dorsal vertebra, with complete paralysis of sensation and motion, and such a state of tension at either end of the sternum, as to separate completely the first bone from the second, this last bone being thrust forwards by the ribs, which were also propelled and drawn upwards by the contraction of the pectoralis major. The poor fellow survived forty days. Although the fracture was fully reduced, there was not any attempt at union. In a second case, the man, who had fallen from a great height, was brought dead to the hospital. In addition to the separation and displacement of the first and second bones of the sternum, there was complete diastasis of the articulations of the pelvis, considerable ecchymosis of the sub-peritoneal cellular tissue, fracture of the seventh cervical vertebra, and dislocation backwards of the right wrist, with fracture of the carpus. There was not any contusion on the anterior paries of the chest, and from the great separation of the bones of the pelvis, without the lower extremities having been bruised, it may be inferred that the man fell first on the nates, and then on the upper part of the spine, for both sides of the seventh cervical arch were broken. The fracture of the sternum must have resulted from its great tension and the contre-coup. The third case occurred in the person of a man who fell upon the back, the fifth cervical vertebra being fractured, whence resulted loss of sensation and motion in the upper and lower extremities. The first bone of the sternum was in this case also separated from the second by contre-coup. A singular symptom, that of constant priapism, continued during the five days that the man survived the accident. A fourth part is reported from the Hôpital Cochin, in which the patient, an athletic carrier, fell from a considerable height on his feet on to a scaffold, and then fell back on the spine and head. The result was a grinding of both ossa calcis to powder, fracture of the spine, and of the left side of the cranium, with depression, and simple oblique fracture of the third bone of the sternum. The patient died in two days.

HYPERTROPHY OF THE TONSILS.

Children and adults are subject to an hypertrophied condition of the tonsils, which is, on the other hand, very rare in old age. The chief cause is repeated attacks of inflammation, although it may occur without having been preceded by any inflammatory attack. It is a mere infirmity, not a disease, life being rarely if ever put in danger, and the hypertrophied tissue

never undergoing any change or degenerescence. With adults the inconvenience it produces is comparatively slight, but with children, by impeding respiration, and thus preventing a full column of air entering the chest, the development of the frame is retarded or arrested, at the same time the enlarged tonsils may compress the Eustachian tubes, and cause a species of deafness, which is occasionally observed in young children laboring under this hypertrophy. Another inconvenience resulting, besides the necessity of sleeping with the mouth open, and producing an unpleasant noise while sleeping, is the great tendency to local inflammation caused by the enlargement of the tonsils.

The use of tonics, bitters, &c., of iodine internally and externally, and of mild soothing applications, have failed in reducing the enlarged tonsil. The topical use of astringent, stimulating, or styptic gargles, or the direct application of caustic, as the nitrate of silver, sulphate of copper, or alum, has been more successful, but it frequently fails altogether. It should be had recourse to only when an operation is refused.

The actual cautery was never held in very high estimation, but the ligature had many partisans, and different instruments were used for its application—a task of considerable difficulty, as the tonsil, when enlarged, does not present a pedicle like a polypus; on the contrary, the base is larger than the apex. Laceration of the tonsil—that is, seizing it with a hook or forceps, and tearing it, or slicing it with the bistoury or pharyngotome, has also been recommended. M. Girardin had recourse to scarifications, and with advantage; but though both these methods may effect a cure, the treatment will be longer, more inconvenient, and painful than that by excision, which ought consequently to be preferred.

A variety of instruments, in the shape of forceps, straight and curved scissors, bistouries, hooks, &c., have been invented for the excision of the tonsils, but they are perfectly useless; a double or single hook, and a common blunt-pointed bistoury are all that is required. A piece of cork placed between the molar teeth, and an assistant to depress the tongue with a spatula, will next be needed; but when the tonsil is hooked and drawn forwards, the patient will be constrained to keep the mouth open. In fact, by drawing on the tonsil, the os hyoides is raised, and the point d'appui of several of the maxillary muscles is removed. In this way the excision of the projecting portion of the hypertrophied tonsil can be readily effected, nor is there any necessity to follow the example of those surgeons who wrap up a part of the bistoury with a piece of rag, or else use an instrument, only a part of the blade of which can cut. There is not any organ which is endangered in the operation.—*Gazette des Hôpitaux*, July, 1842.

OBITUARIES.

At Rouen, M. Vigné, author of the treatise on "Apparent Death."

We also have to announce, with regret, the death of M. Hourmann, physician to the Female Venereal Hospital at Paris. M. Hourmann was a young physician of very high promise, and had recently received, as the reward of his labor, the decoration of the Legion of Honor. About twelve months ago he inoculated his finger with venereal matter, while dressing a woman laboring under syphilis; secondary symptoms set in; the bones of the head were attacked, and M. Hourmann sunk under the disease.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, October 14, 1842.

T. Prat, J. Moore, H. D. Scholfield, J. Rhodes, W. Boyd, C. D. Telfair, J. L. Vickerman, J. I. Acheson, J. M. Best.

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TO CORRESPONDENTS.

The cases of *Mr. Elliott*, *Mr. Allison*, and *Mr. Barrett*, shall appear next week.

We beg to decline the communication from *Liverpool*, on diseases of the extremities of bones. We are unwilling to divert our correspondent from the Journal which he has so ably assisted by his contributions, and which would feel his loss severely.

S. S. (Leeds).—The advertisement forwarded to us is an infamous attempt to impose some quack on the public under the name and with the titles of *Dr. Blundell*. The venerable professor never probably heard of the man or saw his advertisement.

Hospital Attendance.—The difficulty of compelling students to furnish certificates of three years' surgical and one year's medical hospital attendance, has induced the council of the college to reconsider their late regulations. We believe it very probable that the retrospective effect of these regulations will be rescinded.

Back Numbers.—In reply to several correspondents, we have again to state that the first twenty-five numbers of the "Provincial Medical and Surgical Journal" are out of print. The succeeding numbers may be ordered through any bookseller.

Student.—Many of the hospitals have reduced their fees, and at them the student can attend during three years for about £26. But in many other hospitals this regulation does not prevail, at least it does not so appear on their advertisements.

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COURSE
OF
CLINICAL LECTURES,
DELIVERED AT
THE MIDDLESEX HOSPITAL.
BY DR. WATSON.
Session 1842-3.

GENTLEMEN,—As your hospital studies have now recommenced with the return of the medical season, I feel assured that you came here not only with increased desire for improvement, but prepared to benefit by the instruction placed within your reach, I do not deem it necessary to dwell at any length on the importance and necessity of close clinical observation. It is a necessary part of medical education, and does not terminate with even the close of the student's probationary career. Every practitioner is in effect a clinical student. To survey and investigate disease at the bed-side, to examine the patient and interrogate him, from the result of those inquiries to compare and deduce facts, and to act on those results, are the daily duties of the practitioner as well as of the lecturer. The knowledge of the practitioner is, to a very great extent, the accumulated experience of his observation. It does not always follow that the experience attained is proportioned to the opportunities presented for its acquisition; and this is a truth which I would strongly impress on your minds. It is quite possible for students to see too much—that is, to see more than they can well observe. Against this mistaken eagerness I think it advisable to caution you; for, while the student should take care accurately to observe each case to which he approaches, and ascertain what may be learned from it, yet where so many and such various cases are within his reach, the numerous phenomena of disease and their novelty may so distract attention as to render him unable to derive any sound knowledge or permanent advantage. Hence the knowledge acquired by the student is too often confused and obscure, the very abundance of opportunities for acquiring it having operated injuriously through injudicious observation. The same remark may be applied to some practitioners, who, in the later periods of their practice, are found to have added comparatively little to their stock of experience; they have had an extensive private practice, without acquiring additional knowledge or reaping experience proportioned to the opportunities which that extensive practice afforded to them.

In the results of clinical instruction something will, undoubtedly, depend on the diversity of talent for observation, and much on the mode and degree in which each student comes prepared to benefit by such investigation. I have every reason to hope that my present auditors came fully and properly prepared, by previous instruction and study, to see and investigate

with advantage. The preliminary course through which you have passed is judicious and indispensable; for it is impossible to form an accurate diagnosis of disease, to observe its effects and progress, unless, by a previous study of anatomy and physiology, you have become familiar with the structure, the functions, and relations of the several organs of the human body. Physiology points out the various ways in which those organs are affected, and their functions perverted by disease; it also performs another very important service—it classifies and gives names to diseases, and thus facilitates study. It is of the highest importance to learn as early as possible the best mode of clinical investigation, and of recording its results; and at a future period it shall be my care to direct your attention to this particular subject, and to impart to you my advice on it. At present I shall do no more than earnestly exhort you to devote yourselves to close and systematic observation of disease, while the opportunities are abundant, and you yourselves are not responsible for the treatment, so that when called on to act independently, and, as practitioners, to incur responsibility, you may be enabled to combat disease with a just confidence, having gathered from past labors the treasure of experience.

Your observation should be searching and accurate, not discontinued until you have fully satisfied yourselves of the identity of each case which may come before you with those of which you have acquired a previous knowledge from books or oral discourses. You must not trust to the names on the cards appended to the bed-head, nor be by them satisfied that the disease of the patient has been accurately and properly described. These names are often misnomers, for it cannot be reasonably expected that in every instance a disease can be accurately diagnosed from the first examination in the taking-in room. Besides, there are many instances in which the medical attendant is baffled or misled by appearances, and in which cases are at first classified under wrong names. Were the students to depend implicitly on those cards, they would be calculated to do him a great disservice, in inducing remissness and neglect of personal examination. Anything else than a true diagnosis of disease is not only unconstructive, but absolutely injurious, for it leaves false impressions, and is calculated to lead to improper treatment. But when the exact nature of each case has been ascertained, the observer is sure to draw from it some precept that will prove useful in subsequent practice. I cannot, then, too earnestly impress on you the necessity of acquiring a habit of systematic observation; this is quickly matured into prompt and accurate discrimination, and will prevent hereafter the doubt and indecision which too frequently occur, to the painful experience of many practitioners, and to many a patient's peril. You will have no card to guide or aid you when you

come to practise independently; and while abundant opportunity of observation is afforded you without the incurring of responsibility, those advantages should be wisely used, to forearm you for the time when responsibility must come.

The remarks which I purpose addressing to you, in the series of lectures now commenced, I can scarcely dignify with the name of lectures; they will merely consist in plain and familiar observations on such cases occurring in the course of the ordinary clinical attendance as may appear particularly deserving of attention. And here I may be asked why I depart from the ordinary course—why not give those lectures in the wards—why not make them literally what they profess to be, clinical or bed-side lectures? But a little reflection must convince you that the latter is not always and in every instance the best and most desirable mode of conveying instruction. There are many reasons why it is not so; amongst others, I may particularise the fact that the time devoted to walking the wards each day, being necessarily limited, both by the convenience of student and lecturer, as well as by the other pressing demands on the latter, is not sufficiently long to admit of everything being said on each case which might be noticed with propriety and benefit. Nearly the full extent of what the clinical teacher can do when walking the wards with his class is to act the part of demonstrator; he can say, observe that tongue, feel that pulse, examine that tumid abdomen; but, if he were to attempt expressing, day after day, all that passed in his own mind while observing each case, not only would much more time be consumed than was practically available for the purpose, but he would run the risk of wearying, by constant repetition of the same remarks in the same or similar cases, those who were punctual in daily attendance on those exercises, or would disappoint the expectations of some who were less regular in attendance. Besides, there are many things which render such a mode of instruction impracticable; it would be needlessly cruel to say, in the hearing of a patient, much which the lecturer must feel desirous of saying to the student. Thus, suppose a case where there was a strong probability that death would ensue, were we to announce that probability in the patient's hearing, the effect produced on his mind may convert probability into reality; the teacher's words may become a self-fulfilling prophecy, and he become the agent of the patient's death. Again, in a case necessarily mortal, although by declaring in the patient's hearing the inevitability of dissolution, the lecturer would not incur the weight of agency in his death, yet his words would be calculated to cause much injurious and unnecessary pain. In short, there are very many cases which must occur to your own minds in which it would be very difficult and indelicate to say, at the patient's bed-side, and in the patient's hearing, everything one might feel desirous of communicating to the pupil. You must, however, bear in mind that the present course of clinical observations in this theatre are only supplementary to, and by no means a substitute for, those strictly clinical instructions given in the ordinary course. And of the series now commenced, I can promise that they shall not be tedious from their length. My intention is simply to

avail myself of the means of conveniently and profitably communicating such remarks as I may be prevented from making with equally good effect in the wards, and to close each day's work with observations applied to the principal cases which has attracted our attention during the visit. On the present occasion I shall confine myself to one of those cases which appear deserving of especial notice, and, as it terminated fatally, offered the opportunity of verifying, by examination after death, the diagnosis of the disease during life.

The case to which I allude was that of William Bedford, a man thirty-three years old, but looking much older, a farm labourer. He entered the hospital on the 30th of August, and many of the present auditory must remember him as a patient. At the period of his admission he was very thin and very feeble. His own statement, in reply to inquiries, was that he was affected with frequent vomiting—that he could retain nothing on his stomach—that no solid food could pass beyond a particular spot, which he pointed out at the lower part of the sternum—that the matter rejected at times appeared like phlegm, and subsequently had become a clear liquid like water—that some time antecedent to his admission he had been able occasionally to get a small morsel of solid food into the stomach—that those occasions became gradually fewer, then altogether ceased—and that, for some time immediately prior to his coming to the hospital, he had been wholly unable to make the smallest morsel pass beyond the spot which he indicated—and that even the liquids to which he was compelled to resort for sustenance began to be rejected. At this time his bowels were sufficiently regular, his urine free, and not discolored. It was very remarkable in this case that the difficulty of retaining food on the stomach, or of even admitting it, had commenced at a very early age. The man was thirty-three years old when admitted to the hospital, and, from his statements, it had been ascertained that the difficulty had commenced full seven years before, when he was twenty-six years of age. The cancer, therefore—for such the disease was—had at that early period made such progress as to create the difficulty, which was experienced only occasionally at first; but, as the disease extended, the difficulty became more frequent, until finally ingestion of solid food into the stomach was utterly impossible, and everything taken for sustenance was instantly rejected. When I examined the patient, on the day after his admission into hospital, I found a sensible, defined hardness across the epigastrium, which was very distinct on the left portion of that region. This resisting hard substance was somewhat tender when pressed upon. Slight pressure on the tumor occasionally caused a crepitating sound, produced by the displacement of flatus. This showed that it could not be formed by a solid mass—the liver, for example, or by the enlarged head of the pancreas, which I have known to occasion a prominent tumor in this situation. It was not an aneurism, for there was no pulsation, nor could we detect any trace of the whizzing sound which generally accompanies aneurism of the abdominal aorta. We concluded, in short, that the patient labored under scirrhus of the stomach. Moreover, as the food never seemed to enter the stomach, and was

rejected almost immediately on being taken, I set the case down as one of cancer affecting the cardiac orifice of that organ. When the pyloric orifice is implicated in any disease which diminishes the *outlet* of the stomach, or impedes the passage of food onwards into the duodenum, while the cardiac opening or *inlet* remains free, then the food enters the stomach readily enough, and is retained there for some time, undergoing digestion more or less perfectly; and it is after this—some time after a meal—when the digested aliment fails to find its way through the natural channel, that it is rejected by vomiting.

Nothing administered was found to do the man any good—that is, any sensible permanent good; nor, indeed, from the diagnosis was any expectation of good to be indulged in. On the 19th of September the patient complained of a good deal of pain just above the navel, and on pressing the finger suddenly downwards in this part of the abdomen, it came in contact with a hard and tender substance. Four days afterwards I could find no trace of hardness or tumor; the epigastrium, however, was more prominent, and was resonant on percussion; indeed, the abdomen was altogether fuller than it had been. On the 5th of October I again searched for the tumor and hardness, but in vain. By this time the man had become extremely emaciated; he was sinking rapidly, and on the 7th of October he died. As I before remarked to you, nothing made any favorable impression on him; he took the liquor potassæ at one time, then hydrocyanic acid, and, as he was unable to get down any solid nutriment, I allowed him some wine and porter, and egg-flip; these he sipped by teaspoonfuls. I also endeavoured to support him by nutritive enemata, and for a few days immediately previous to his decease enemata of beef-tea were thrown up; but this was found to cause so much distress and pain, without the possibility of effecting any good, that it was abandoned. For the few days before his death his appearance was remarkable; the face and neck were of a livid red, the tongue red and foul.

The diagnosis in this case was not very difficult, and was justified by what we found on examination after death. The cavity of the peritoneum contained a considerable quantity of a brownish colored transparent fluid, of a very disagreeable odor. To the effusion of this liquid I attribute the fact that the tumor, which was partly formed by the stomach and partly by omentum, ceased to be palpable at one time, though it was easily detected some time before. The lesson you may draw from this fact is, that negative signs, if I may so call them, are of less value than those which are positive. The absence of any apparent tumor was deceitful, but we were sure that it was there, because we had previously felt it. The tumor detected on the day of the patient's admission into hospital, and for three weeks subsequently, was formed by the indurated portion of the stomach; the second tumor, discovered on pressing the finger firmly above the umbilicus, was the omentum, which was rolled and matted together, and full of small masses of cancerous deposit. The stomach was small, and exhibited a fine specimen of scirrhus affecting both the cardiac and pyloric orifices of the organ. The lower part of the œsophagus and the upper portion of the duodenum were likewise involved in the disease.

In addition to this, there was a growth of matter apparently cancerous from the internal membrane of the stomach itself.

The mode of death in this case was particularly worthy of notice. It is not often that an opportunity occurs of observing a case of actual starvation, of death from total want of food, a gradual sinking under its effects. Such a phenomenon this case presented. During more than six weeks of his residence in this hospital the patient scarcely swallowed a morsel of solid food; he certainly retained none on the stomach; during the whole of the time he was kept alive by liquids, but he gradually wasted away; his heart acted with less and less vigor, and at length, while his intellectual faculties remained unimpaired, the pulse ceased to be felt at the wrists, and he expired from asthenia and syncope conjointly. One of the morbid symptoms of starvation is unusual fullness of the gall-bladder. That symptom was here developed; the fluid in the gall-bladder reached to the very edges of the orifice, and the bile was prevented from escaping, probably only by the pressure of the diseased and hardened parts on the excretory duct of the liver. Whether in analogous cases the bile is confined by some such mechanical cause or not, has not satisfactorily been ascertained. With all this quantity of bile, and the tendency to absorption that existed, there was no appearance of jaundice.

The case of William Bedford, then, was one of cancer; but on looking at the diseased parts now before you, you will see a false appearance of cancer, arising from hypertrophy of the muscular fibres which propel the digested food through the pyloric orifice of the stomach. Like all muscles impeded in action, they have been excited to extraordinary efforts; and the increase of functional effort, according to a well known law, leads to an increase of growth.

Cancer is a very obscure disease, and one of the most important subjects for the consideration of the pathologist. Its fatality and frequent occurrence, the acute pain by which it is generally attended, and its hereditary character, combine to render it of extreme interest. But another interest attaches to it, from the obscure nature of the organic element of the disease, and from its peculiar mode of growth. Recently much light had been thrown on the subject, and it is to be hoped that still greater light is about to be thrown on it, for all pathologists looked with anxiety to the result of Mr. Kiernan's investigations, which I believe will shortly be placed before the profession. In the "Lancet," Dr. William Budd, of Bristol, has published two very interesting papers, to which I would direct your particular attention. They were published in two consecutive numbers of that journal for May last, and they are written, as everything from the pen of Dr. William Budd, extremely well. Whatever may be the causes of cancer, it appears to be clearly ascertained that, however numerous or distant from each other the parts affected by it, the infection proceeds from one original tumor. It often occurs that the disease manifests itself in different parts of the body, sometimes contemporaneously, sometimes at different periods. But all those are but branches of the same malady. Generally speaking, the internal parts are affected at a period subsequent to the appearance of the disease externally.

Dr. Budd has directed attention to the progress of cancer under some of its ordinary phases. Let us state an example: a small, hard knot is detected in the female breast, lying loose in that organ; this tumor enlarges, grows, fastens on the parts around, no longer lies loose in the cellular tissue, but contracts adhesions with the surrounding parts, spreads out its claws, as it were, like a crab (hence the name cancer), seizes on the glands of the axilla, and disseminates small tumors through the viscera. On examination after death, cancerous matter is detected in the viscera and lymphatic glands, and is frequently found in the lungs, the liver, and peritoneum. From these facts, and from the circumstance that the veins are found charged with the same cancerous matter, Dr. Budd infers (and a most important inference it is, if drawn from a sufficient number of authenticated facts) that the secondary tumors discovered in the viscera, and other parts so diseased, are derived from the first tumor—are caused by seeds from the primary or parent growth, conveyed by the blood to those localities, and form themselves new centres for the further dissemination of the complaint. Some curious results of the microscopic investigation of cancerous matter are adduced in aid of this hypothesis. The labors of Müller, who has investigated the minute anatomy of cancer by the help of the microscope show that the substance of cancerous tumors is a soft kind of pulp, held loosely together by a fibrous web. The pulpy matter presents an organised form of an extremely interesting kind, being found to be almost entirely composed of minute globular cells, containing within their cavities a vast number of very minute granules. Similar cells are found in the organisation of portions of the vegetable kingdom. Those granules are supposed to be what are called *cysto-blasts*, or germs of new cells, and becoming detached from their parent cells, are carried about until deposited in some place where, from their size, they are unable to pass through the smaller capillary vessels, and there they become parent cells, and engender new growths. This is a consideration of immense practical importance, as if, fully established, it would of itself demonstrate the necessity of immediate removal of the first cancerous tumor by the knife, and of its complete removal. The timely extirpation of cancerous growths is thus indispensable. In very many cases removal by the knife has proved fully successful in wholly eradicating the disease; in many cases it had not been successful. But in the latter it is inferred that the removal of the cancerous matter had not been complete—that either the operation had been deferred until the germs had been disseminated, or that the knife had not removed the whole of the diseased matter. So very minute are those germs, that it is altogether impossible to detect them unless by means of microscopic power; and Dr. Budd recommends that the cut surface should be subjected to microscopic examination, as if on that surface be found any of those cells, the clear inference is, that others have been left behind, and consequently that the removal has been incomplete. In those operations the surgeon should cut away not only enough, but what may be called more than enough.

This subject, Gentlemen, is altogether most interesting; but it requires further examination. What

the exact nature, and what the origin of those minute cells, are as yet uncertain; they may be termed a sort of hydatids. They appear, like plants, gifted with an independent vitality, possessing the power of generation, increasing and multiplying prodigiously, and capable of being conveyed to remote distances from the parent growth, without losing their character or powers; they might indeed be appropriately called a sort of parasitic animal. What is the origin of the primary or parent growth, it is, at least as yet, impossible to say. Some authors contended that cancer is infectious and contagious. Dr. Budd states that Langenbeck injected cancerous pulp from a living body into the veins of a dog; the animal after some time wasted away and died, and on examination several cancerous tumors were found in his lungs. Soot is supposed to be a cause of cancer, and one species of that disease is known as chimney-sweeper's cancer. Dr. Budd has alluded to cases of cancer of the penis in men, whose wives labored under cancer of the uterus, which would tend to establish the doctrine of its being contagious. The germs of cancer clearly possess an independent vitality, and are like parasitic animals, or a kind of fungous growth, perhaps somewhat resembling the disease known as scald head, which is now held to depend on a sort of cryptogamic plant, the *habitat* or one of the *habitats* of which is the human head. As I totally disbelieve the doctrine of spontaneous generation, I cannot yield to the suggestion that these germs originate in the body, but am of opinion that they are introduced by some yet unascertained mode. The introduction of insects into the human frame by unknown means is familiar to us all, and from all that is known I am induced to believe that cancerous matter is similarly introduced. In conclusion, I would again impress on the student the necessity of pursuing this important investigation, and again strongly recommend to him a careful perusal of the whole essay of Dr. Budd, as most interesting and instructive. Our familiar conversation on this day must now close. The portion of the intestines of Bedford, to which I wished to draw your particular attention, lie on the table for closer inspection, and from that inspection you will find the diagnosis fully verified. At our next meeting I shall address to you some observations on the modes of conducting clinical investigation, and recording its results.

COURSE

OF

LECTURES ON ORGANIC CHEMISTRY,

AS APPLIED TO

MANUFACTURES AND AGRICULTURE.

By M. PAYEN, Member of the Institute.

LECTURE II.

PRESERVATION OF WOOD.

Alterations of Wood—Chief Causes—Attacks of Insects—Mode of Detecting Albumen—Various Modes of Preservation.

GENTLEMEN,—The subject of the preservation of wood is one of the utmost importance in various points of view. The use of this material is daily becoming more necessary, while the progress of civilisation is gradually exhausting the source from which it is ob-

tained. Our railroads require an immense supply of timber; our navy likewise; in almost every department of industry on a grand scale wood is employed in greater or less quantity, while the causes of decay which are inherent in or accidental to it are numerous, and incessantly working out its destruction.

Let us then inquire into the nature of these causes, and endeavour to ascertain the means by which they may be obviated. To understand the subject of which I am about to treat, you must remember the facts mentioned in my last lecture relative to vegetable albumen. This substance, analogous in every respect to animal albumen, fills up the cellular cavities of wood, and is both a remote and immediate cause of decay; it attracts insects, and contains many of the elements of putrefaction. If timber was composed of nothing but pure cellulin, it would resist all the causes which induce decay, because cellulin is an inalterable substance; but it is always united with the tenacious matter already alluded to, and with a substance analogous to animal matter, which pervades all the cells, and influences in no small degree its power of resistance.

Albumen is the substance on which the insects that destroy timber live; they penetrate into the deepest cells, and riddle the wood in every direction for the purpose of arriving at it; hence, if we can remove the albumen, or render it indestructible by the aid of any chemical substance, the timber is completely preserved from the attacks of these destructive insects.

Another cause of decay resides in the influence of moist air and a moderate heat on the albuminous matter continued in the cells of wood. Some modern writers describe two forms of decay, the one moist, the other dry or *eremacausis*; but timber never undergoes any change in perfectly dry air; putrefaction cannot exist without moisture.

The manner in which vegetable albumen undergoes decomposition is exactly similar to that of animal matter; ammonia or carbonate of ammonia, carburetted hydrogen, carbonic acid, &c., are disengaged. The decay is favored, as I have said, by a variety of circumstances. When rain has penetrated the bark of a tree, and the albumen become moistened, decay commences in small points, and an access is opened for parasitical growths, &c. This also occurs in wood which has been long exposed under the air, and when the parasites just alluded to have once attacked timber, they render its decomposition more active and general.

When it is necessary to make a selection in our choice of wood for any construction, the first point to be inquired into is the quantity of albumen contained in it, for the durability of the timber will, *ceteris paribus*, be in an inverse proportion to its quantity of albumen. The quantity of the latter substance in a given volume of timber may be ascertained by a simple experiment, which consists in treating a small bit of the wood with a solution of caustic soda, at a high temperature. The soda dissolves the albumen, but leaves the cellulin unchanged. If the wood be weighed before and after the experiment the loss of weight will give the quantity of albumen. We may apply this fact to other useful purposes. Thus it will enable us to determine whether a woollen tissue is mixed with cotton, silk, &c., for the cotton remains unchanged, while the wool and silk are completely

dissolved. From what has been said, it follows that the arrangement of wood into *hard, soft, &c.*, is one founded on practical views. The poplar is a white wood, light and tender, because its tissue is loose and it contains a good deal of air with a quantity of azotised fluids; these are all so many causes of decay; the birch is a similar kind of timber, and, therefore, never employed for durable work; the oak, on the other hand, is a hard timber, its ligneous cells are closely set together and contain but a very small quantity of albumen. In 100 parts of oak timber we find 40 of cellulin, and nearly 60 of tenacious matter; it resists friction well, but not so well decomposition; it keeps well enough in water, because its tannin becoming dissolved acts on the albumen of the ligneous cells. The acacia is the timber least subject to decay, and the one which contains the greatest proportion of cellulin. Experience proves that it will last for fifteen to twenty years, under circumstances which cause the decay of oak timber in one or two years. The wood of the pine and fir tree is little liable to decay, but no means have been, as yet, discovered to preserve it from the attacks of insects.

We have just shown that the presence of albuminous matter in timber is the cause of the changes which lead to its decay; hence, it becomes a point of the first importance in the preservation of timber to remove the albumen or change it into an inalterable compound; upon these principles are founded the various methods employed for the preservation of wood. Hales, Duhamel, Buffon, &c., were the first who directed attention to this subject, and pointed out the means of rendering wood indestructible. A few years ago M. Biot showed that pressure might be employed for the purpose of forcing certain fluids into the heart of timber. It was even remarked that if a block of wood be placed upright in water it will gradually imbibe a large quantity of the fluid. This, however, is a very imperfect method, for the fluid penetrates into certain parts only, and the centre, in particular, is left untouched. M. Boucherie has availed himself of the natural circulation of fluids through all parts of plants to introduce antiseptic fluids into them. By his process he has impregnated trees of twenty to twenty-four feet high in ten or twelve days, even the leaves were impregnated. The process may be applied to tress while growing or after they have been cut down. When the tree is growing the following is the method employed:—A portion of the tree, to a certain depth, is sawn through on both sides, and the tree is supported by props to prevent accidents from the wind, &c. A band of leather or Indian rubber is then applied round the tree, both above and below the cuts made with the saw; the band is attached firmly with ropes, and the folds carefully closed with moistened clay. Two openings are then made in the band, and through them pass two tubes from the saw-cuts to a large tub filled with a saline solution. The fluid is soon drawn up by the tree, and reaches rapidly the most remote and the smallest branches.

It is more easy, however, and just as efficacious to cut down the tree and remove its smaller branches; a few tufts of leaves may be allowed to remain, but this does not seem to be absolutely requisite. The tub is placed on a very high pedestal, and the tubes, as in the former instance, introduced near the base of the

In this way the force of atmospheric pressure contributes very powerfully to the ascent of the fluid. Mr. Kyan has recently proposed a method much employed in England. The timber is cut up into planks of various sizes, placed in a large reservoir containing a solution of corrosive sublimate, where they remain for seven or eight days; after this they may be used for various purposes. The Duke of Devonshire employed wood prepared in this way in the construction of some hot-houses, and the timber is said to have resisted perfectly the attacks of insects and the effects of the weather.

As a general proposition we may lay down that all chemical substances which preserve animal matter are likewise suited for the preservation of vegetable matter. Corrosive sublimate, which is used for the preservation of anatomical preparations, coagulates animal albumen and forms with it an insoluble compound. Tannin, also, which combines with animal tissues, may be employed in the preservation of timber. Still the price of corrosive sublimate, which costs from five to six shillings the pound, must render the use of Mr. Kyan's process extremely limited.

M. Moll has proposed the use of creasote, and we know that the preservation of smoked meats depends on the presence of a small quantity of this substance. M. Moll proposed to expose the planks to the action of tar vapor; but, we repeat, the price of creasote and of corrosive sublimate must, except in a few limited cases, render their use impracticable.

M. Breant invented an apparatus much employed in some places for the preservation of wood. His apparatus enables him to compress the air contained in the ligneous cells, and the vacua thus formed contribute in no small degree to assist the imbibition or aspiration of the antiseptic fluid. This process is peculiarly suited to small pieces of timber, and is more complete than any other one. In Mr. Boucherie's method the whole tree is very seldom impregnated; the superficial layers imbibe the fluid, but the central parts and such as have ceased to live for some time are rarely, if ever, touched. By M. Breant's process, on the contrary, almost every particle of the timber is impregnated; the knots and the densest portions of the heart of the tree may resist, but these are generally so solid that they escape every kind of decay.

From M. Breant's idea has originated the plan of submitting wood to the action of heated fluids. The heat expands the air contained in the ligneous cells, expels it, and thus favors the ascent of the antiseptic fluid. In this way solutions of white resin, tar, &c., have been introduced into various kinds of wood. A particular preparation of linseed oil has likewise been employed, according to this process, with the most perfect success; wood prepared with it has remained free from rot under circumstances most favorable to the development of decay.

The sulphate of iron has been frequently employed, but M. Breant justly remarks that it should never be used by itself; a small quantity of the oxide of iron often combines with the various organic matters contained in the ligneous cells, while the sulphuric acid is set free and corrodes the timber on all sides. Wood preserved with a solution of sulphate of iron frequently crumbles into dust.

Long before any attempts were made to preserve

timber artificially it had been remarked that the wood employed in salt-mines remained perfectly free from decay, and that the beams and planks, &c., were occasionally covered by a species of efflorescence. The latter depends on the different degrees of temperature to which the wood is exposed, and to the presence of a small quantity of sulphate of soda in the common salt. The preservation of the timber evidently depends on its being impregnated with chloride of sodium, the preservative *par excellence* of all organic substance.

The observations now mentioned were first made in the salt-mines of Saltzbourg, and were afterwards repeated in those of Dieuze; the result of the experiments made leaves no doubt but that wood impregnated with a solution of salt is perfectly free from every species of alteration. Still the application of this method is comparatively limited, from the tendency of salt to attract moisture, and from its being always mixed with a small quantity of deliquescent salts, as the chloride of magnesium, of calcium, &c.

The various processes now described have been applied to the preparation of timber used for fancy articles, &c. Thus, when the wood of the plane-tree is impregnated with a solution of pyrolignite of iron, and then polished, it presents a very elegant tint, and is marbled in a curious manner.

Again, by employing a solution of tannin in the first instance, and then the pyrolignite of iron, a species of ink is formed in the ligneous cells, which gives a beautiful marbled appearance to the wood when polished. By varying the coloring matter there is little doubt but that we could obtain wood which would rival any foreign timber in brilliancy of color and durability.

CASE OF STONE,

IN WHICH THE OPERATION OF LITHOTRITY WAS ONCE,
AND THAT OF LITHOTOMY TWICE, PERFORMED.

WITH REMARKS.

By ROBERT ELLIOTT, Esq., M.R.C.S., Surgeon,
Chichester.

Mr. C. H., aged sixty-three, a highly respectable farmer, living in my immediate neighbourhood, a man of temperate habits, and the father of a large family, first consulted me in the month of Nov., 1837. Up to within a year of that time he had enjoyed excellent health with the exception of occasional attacks of dyspeptic headache, but then first began to suffer from symptoms of stone. In January, 1838, the symptoms had become so urgent that he consented to an examination, and, on sounding, a stone of considerable magnitude was found presenting itself at the fundus of the bladder. It was fixed immovably in that position, the instrument coming in contact only with its upper surface, and the irregular contractions of the bladder causing the contents of that viscus to assume the appearance of septa. Many unsuccessful attempts were made to dislodge the stone, but, after persevering patiently for about three weeks, I ultimately succeeded in tilting it from its position.

The spasms which followed the introduction of the instrument were subdued by morphia.

The stone, once removed from the sac, never returned to its old position, and, finding that it remained loose in the bladder, I determined on its destruction by the lithotrite. The operation was performed in March

following, when the stone was found by that instrument to measure two inches and a-half by two inches.

The operation was repeated five times, an injection of morphia being introduced into the bladder prior to each operation. The table which I used was somewhat after the plan of Baron Heurteloup's, and the only instruments employed were the lithotrite of Weiss, the stop-cock catheter, and the common hammer.

No difficulty occurred during the operation save the spasm, which was subdued, as before stated, by morphia. The detritus passed easily, and a quantity, which filled an ounce pill-box, was collected; but much, of course, escaped. No symptoms of stone remained, and on many subsequent soundings no vestige of a calculus could be discovered. He remained in perfect health, could take active exercise, and attend to his various duties of life with uninterrupted comfort for about a year, after which he was seized with repeated attacks and escapes of renal calculi.

As but little inconvenience was felt after the calculi had reached the bladder, my patient would not consent to anything approaching an operation, not even to the use of the sound. By degrees the calculi enlarged, the irritation increased, and at length, in Dec., 1839, when in his sixty-fifth year, he was compelled to submit to an examination. At this time there was enlargement of the prostate, much thickening of the coats of the bladder, muco-purulent deposit, and all the usual symptoms of stone.

The enlargement of the prostate, the existing irritation of the bladder, and the fact of there being more than one stone, induced me to propose the operation of lithotomy. The patient consenting, the lateral operation was performed on the 22nd Dec., 1839, and four calculi of triple phosphate formation, weighing about two drachms, were removed.

The operation lasted but a short time, no difficulty presented itself, and but little blood was lost. The first flow of urine through the wound was attended with agonizing pain, but this was subdued by morphia. The urine continued to flow for three weeks, and nothing more unsatisfactory occurred. At the end of a month he was perfectly cured and dined at his own table; but on the evening of that day he was attacked by a severe renal paroxysm, followed by the passage of another calculus from the kidney.

Nearly two years rolled on without inconvenience, and in March, 1842, then sixty-seven years old, he again consulted me, fresh symptoms having occurred. There was incontinence of urine, muco-purulent deposit to an extraordinary extent, with great pain and constant distress. Cupping, leeches, and warm baths were had recourse to, with a substitution of alkalis for other medicines, as the urine indicated. On sounding, a stone was distinctly discovered. A consultation was accordingly held with Mr. Heulstone, my late partner, and Dr. McCarrogher, and it was again determined to repeat the operation of lithotomy as offering the best chance of success. On the 19th of July last, in the presence of the above-mentioned gentlemen, I proceeded to the operation precisely in the same manner as before, but avoiding the old cicatrix, and removed a kidney-shaped calculus of the triple phosphate formation, weighing five drachms. Nothing particular occurred during the operation, which lasted

about five minutes; but the parts were extremely sensitive, much more pain being experienced by the patient than on the former occasion. The same excruciating pain was felt on the first flow of water as on the first occasion, and subdued by morphia; the quantity of blood lost was estimated at about two ounces. On the second morning from the operation one quart of water came away by the natural passage, and twenty-five napkins were saturated on that day; on the following (the third) morning I was surprised to find the opening permanently healed, and from that time not one drop of urine ever passed by the wound. In a fortnight he was comparatively well, and now, after the lapse of nearly three months, states that he was never better in his life.

REMARKS.

The foregoing case appeared to me to present features of sufficient interest to deserve record. The large size of the original calculus, the sacculated state of the bladder, the time required for the removal of the calculus from its position, with the complete success of the operation of lithotripsy, give an interest to the early history of the case. It is worthy of remark, too, that the prostate, in consequence probably of the calculus being enclosed in a sac, did not suffer previously to the first operation, but was considerably enlarged by the time that the first operation of lithotomy became necessary. There was satisfactory proof of the original stone having been entirely removed. The quantity of detritus, the continued absence of symptoms until after the renal paroxysms, and the stones subsequently removed having the appearance of original formations with distinct nuclei, are circumstances which establish this point.

The second operation presented some points of interest. The unusually small quantity of blood lost, the number of napkins removed on the second day, the sudden closing of the wound on the third day, and the rapid recovery of the patient, are points worthy of notice. Of course, it is quite impossible to say that the patient will have no return of his complaint, as the calculi are of renal formation. There is, however, no pain or tenderness in the lumbar region. It is also well worthy of remark that the dyspeptic headaches, to which the patient was originally subject, left him after the appearance of symptoms of stone. This fact tends to strengthen the general opinion, which my own experience confirms, that calculous disorders are closely connected with, and indeed dependent upon, derangements in the digestive organs.

Chichester, October 7, 1842.

PAINFUL AFFECTION OF THE CERVIX UTERI.—EXCISION.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I send you what I think you will suppose may be about a third part of a uterus, including the neck, which I removed under the following circumstances:—

Ann Sprental, a pauper of Retford parish, aged seventeen, during the last two years had been attended, each year by a different surgeon, and each surgeon had requested a different physician to see her occasionally. I do not know how she had been

treated before I undertook the parish duties; but the inflammatory stage was over, and I found her with the following symptoms:—Countenance expressive of disease; skin blanched, as if from hæmorrhage, but of a yellow-white color; pulse quick and thready; flesh reduced and flabby; constant watchfulness (no sleep); acute and almost incessant pain in the regions of the bladder and rectum, increased on passing urine or stools; and the os uteri and its neck exceedingly sensitive. Both the breasts were enlarged, one more so than the other (as generally occurs in these cases); the secretions were scanty and unhealthy. She made no complaint of the head or back. There was no redness or tenderness of the vagina, or tenderness of the uterus beyond its neck. The neck of the uterus, and a little beyond it, was firm; and just beyond the circumscribed firm part she did not complain on pressure.

Soon after I began to attend her she had hysterical retention of urine, requiring the use of the catheter every eight or twelve hours during some weeks.

The remedies which I tried were—a more nourishing diet; the carbonate of iron; Fowler's arsenical solution; quinine; a warm hip-bath gradually reduced to a cool one; fœtid pill with zinc, and valerian tea with tincture of castor; the hydriodate of potash. Then mere palliatives—decoction of pareira brava root containing soda and the tinctures of henbane and tobacco; opium in the rectum; fœtid injections; balsam of copaiba with turpentine injections; the application of lunar caustic and of extract of belladonna to the neck of the uterus, &c.—all to no purpose.

She was sent to the Nottingham Hospital, and she returned without having obtained relief. She and her parents begged I would try some fresh remedies, though I was not then the parish surgeon. I considered the removal of the painful part of the uterus the only resource; to which they all readily assented, declaring that death would be preferable to such a constant state of suffering.

Although I did not know that the affection would ever assume a malignant character, yet there was no prospect of an improved state of health to subdue the complaint; her sufferings had become intense from shooting, quivering, and burning pains, “as if lightning passed suddenly through the body;” she was undermining the health of her parents and of a younger sister (all living together in two small rooms in a closely confined locality). I could not prevail upon the parents to have her placed, without her own consent, in the workhouse; and removal of the painful part might give her a chance of getting rest and strength. I explained the consequences of the operation with respect to its endangering life, as well as the uncertainty of its affording relief, and the certainty of its preventing child-bearing. After which, as they all still begged to have the part removed, I excised it beyond the sensitive point; not more than three or four ounces of blood were lost.

The patient never suffered such violent pain after the operation, as she did previously, nor had she any difficulty in passing her urine or stools. But when she was relieved from pain, the overseers withdrew the additional parish allowance, and those neighbours who had been charitable became tired of the continued demand for animal food and porter. These circum-

stances I did not know of until a supply from myself was too late. The mother and the child were both worn out by sickness, poverty, and starvation. The daughter died fourteen months after the operation, and the mother did not long survive her.

At the period of the patient's death I was too much engaged to examine the head or spine; but I removed the contents of the abdomen and pelvis. The bladder, the remaining part of the uterus, and a portion of the rectum were thickened, and all connected with each other by morbid adhesions. They probably were so when I removed the affected part of the uterus.

Although I do not suppose the operation would have been a means of restoring the girl to health if she could have had every advantage from a nourishing diet, fresh air, &c., yet the foregoing case is calculated to prove the extent to which disease and nervous affections may advance in youth, when the subject is placed under adverse circumstances; and it affords another instance of the slight hæmorrhage which occurs after the removal of a considerable portion of the uterus.

Many years ago I saw a girl, aged twenty-five, who had considerable enlargement and elongation of the neck of the uterus. This species of enlargement generally feels soft, but in the case now alluded to it was as hard as gristle; the vaginal discharge was unusual in odor and in quantity. The pains so much resembled those of true cancer, that I believed the disease would increase so as to destroy life; but, instead of increasing, the affection gradually diminished until the girl was in a tolerably good state of health; she left this neighbourhood, married, and had a child, though she did not live long afterwards. I was told by her relatives that she died of “the old complaint,” for the medical man who attended her said “it was a disease of the womb.”

I am, Gentlemen,

Yours very respectfully,

W. ALLISON.

East Retford, Oct., 1842.

ASIATIC AND ENGLISH CHOLERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If we may judge from some late communications to your Journal and the “Medical Gazette,” the *questio vexata* of what is Asiatic cholera has yet to be solved. Thus, we have on the one side two cases of Asiatic cholera forwarded you by Mr. West, of Poole, and one to the “Medical Gazette,” by Dr. Ayres, of Thame (Medical Gazette, Sept. 30), whilst on the other we have Mr. Salter, a gentleman of thirty years' experience in the locality of Mr. West's cases, giving us an article on the “Diagnosis of Asiatic and English Cholera,” in which, though he courteously disclaims any “desire to impugn the correctness of your very respectable correspondent's observations,” he urges the importance of correct diagnosis, and in the latter part of his article remarks with respect to what he terms the “genuine oriental cholera.” “In the first case that came under my observation, I felt that I was in the presence of a new disease, and that what I then witnessed I had never before seen; and I have

no hesitation in saying that, since the disappearance of that epidemic, nothing resembling it has crossed my path." There can be no misunderstanding this; he considers Asiatic cholera, if cholera at all, to be a cholera sui generis, whilst the communications of Mr. West and Dr. Ayres would lead us to the conclusion that they consider "the Asiatic cholera itself," to quote the words of Dr. Ayres, "may be nothing more than an aggravated form of the disease so long familiar to us."

On which side does truth rest? No doubt, if we consider the intensity of the cholera such as it appeared in 1831-2-3, it was a new disease; at least, for my own part, I have seen nothing approaching to it in this respect, and there were circumstances attending it which I have never met with except then—e. g., the *intense* blueness, and, if the expression be allowable, the more than deadly coldness of the body during life, with the singular return of warmth and natural color after death; the insusceptibility to blisters and sinapisms at the commencement, and the occurrence of vesication some days after at the parts where they had been applied; and lastly, the much talked of post-mortem muscular action—circumstances which, no doubt, were witnessed by most medical men conversant with cholera at the period in question.

Few of your readers will, I think, dissent from Mr. Salter's opinion that rice-water evacuations, spasmodic tension of the muscles, and the blue skin cannot be considered pathognomonic of Asiatic cholera; and I must add, that whilst I allow that cholera cases do not now (at least under my observation) present us with any approach to the intensity of what was termed Asiatic cholera, yet in a modified degree they exhibit most of the symptoms mentioned by Mr. Salter as "the symptoms belonging to the early stage of Indian cholera most to be relied upon"—viz., "a remarkable shrinking or shrivelling up of the person, and especially of the hands, fingers, and tongue, with cold breath, and a squeaking, indistinct voice, scarcely to be heard, or, as Dr. Barry has described it, 'the low whine like that of a dog dying from arsenic.' Several of these symptoms I have seen in the cholera of this season, the alteration of the voice particularly; whilst I have just ceased attending a case where the secondary fever, one of the symptoms most pathognomonic of Asiatic cholera, according to Mr. Salter, occurred in the second stage and required appropriate treatment. In this case, during the first stage, there was entire suppression of urine; the purging, which was checked at an early period by a remedy I shall presently mention, was at first colorless and watery; subsequently, when it occasionally occurred, it was very dark and more solid, and gradually became natural; the matter vomited was green; the voice reduced to a whisper; there was also a symptom which I well remember to have noticed in the Asiatic cholera—viz., abdominal tenderness on pressure, and which I saw treated by cupping with advantage. There was also a degree of mental torpor not dependent on the administration of opium, to which, after the commencement, it was seldom necessary to recur.

I have by me the notes of a case of English cholera, as I called it, which was under my care in 1837. Mr.

Turner, of Sherborne, where I was then practising, attended it with me. Our patient, an athletic Scotchman, was taken with the usual symptoms of English cholera on Wednesday, December 27. I find these two remarks in my notes of his state on the evening of the first day:—"there is great apathy; he has made very little water." On the second day the purging and vomiting were restrained, the natural heat restored, the cramps relieved, and we hoped to save him. "Third day: Certainly worse; pulse between 80 and 90, very compressible; skin warm; great apathy; he requires to be roused to get him to take anything; the conjunctiva injected, and the pupil contracted; puffs in his breathing during his sleep; this he has done all the time; has made very little water, and latterly none; one purging stool during the night; answers if spoken to, but does so with great apathy, showing no anxiety about his state nor any wish to see his friends; a great disposition to doze. Fourth day: Decidedly worse; lies in a heavy state; it is with great difficulty he can be got to take his gruel, &c.; skin warm; conjunctiva as before; the pupils contracted; slightly sensible to light; gives no indication of feeling when the soles of his feet are tickled; when spoken to answers in a sleepy manner, and then relapses into the same dozy state as before; no action from the bowels; makes no water." He rapidly got worse during the day, the different symptoms becoming aggravated, and his breathing decidedly stertorous; and he died at eleven, p.m.

Post Mortem Examination in Twenty-four Hours.

There was very little congestion of the vessels of the scalp, nor any of the vessels of the brain, which, indeed, seemed wanting in blood; no serous effusion in cavities of head.

Thorax.—Large quantity of dark blood on right side of heart; lungs gorged with same; plural adhesions on right side, probably of some standing.

Abdomen.—Gall-bladder about half full of dark-colored bile, which did not easily pass out into the gut when pressed; no marks of inflammation about the peritoneum. Mucous surface of stomach covered with dark patches of congestion or inflammation, the intestinal canal presenting the same appearance in a much less degree; contents much resembling those of health; bladder containing four ounces of turbid fluid, very unlike urine and without its odor; kidneys healthy. It appears to me that we have here much the state of things mentioned by Mr. Salter, as pathognomonic of Asiatic cholera in its second stage, and resembling (though of a more intense degree) the symptoms of my other patient. I was surprised at not finding appearances in the brain to account for the torpor in which he lay, but there were none. A remark of Dr. Ayre's on his quotation of Wittstock's "Analysis of Cholera Stools" will, I think, solve the difficulty. "The most remarkable part of this analysis is the presence of uric acid; and it proves, if correct, that that substance, instead of being separated from the blood by the kidneys, flows with the fluid portion of the blood, which holds it in solution into the intestines." Now, it is to be observed in the case I am mentioning, that, whilst the purging was stopped on the second day, the secretion of urine was not restored, and it appears to me a reasonable supposition that to the circulation of urea, thus thrown

back on the system, may be attributed the torpor, which is so well-known a symptom in suppression of urine. If this idea be correct it would lead to this practical precaution—viz., to be careful even in cases of cholera how we entirely suppress the alvine discharges till the urinary secretion be re-established, should there be any disposition to torpor. Certainly in the case I have mentioned as having been lately under my care, the mental torpor came on after the purging had ceased and before the urinary secretion was properly established, and it was not the effect of opium.

It will be evident, from the preceding remarks, that I am not prepared to assent to Mr. Salter's opinion on the nature of the difference between Asiatic and English cholera, but that I look on them as identical in fundamental character, though, from circumstances which I believe we do not understand, differing very widely in intensity; and, from what I saw of Asiatic cholera, I do not believe it to be any more contagious than English cholera—i. e., not at all. Certainly, in some of the neighbourhoods it attacked, there were local circumstances which might have given any disease a character of intensity; thus one of the spots which most suffered from its ravages at the West-end was a line of buildings at the back of Grosvenor-place, and I remember its being stated that the drainage in that neighbourhood was particularly bad.

Who would imagine at first sight that the innocent cow-pox was but a modification of the virulent small-pox? In this case experimental investigations have proved what are the modifying circumstances, and it requires, I think, no high degree of credulity to believe that such differences as exist between Asiatic and English cholera might arise from circumstances, the nature of which it may be granted we are at present ignorant of. The proverb of Solomon that "there is nothing new under the sun" is not inapplicable to pathology, nor will it be till the human constitution and the circumstances under which it is placed become changed.

Much as I respect an experience of thirty years, I cannot agree with Mr. Salter, that "the English cholera, though occasionally a fatal complaint, is rarely attended with much danger." Certainly it has been my lot to be called, and not unfrequently, to cases where I verily believe that another hour's unchecked duration of the symptoms would have reduced the patients to a state insensible to the influence of medicine. I do not say that there is much field for the exhibition of skill, but there is for decision and promptitude in the application and unwearied exertion in the continuance of remedies. In severe English, as in Asiatic cholera, it is generally in the first stage that the battle is to be fought. A remedy which I have found very valuable is the decoction of logwood; it has so little unpleasantness of taste, and is so efficient, that it merits more frequent employment than, if I may judge from the remarks of my druggist, it obtains. I have used it in the proportion of two ounces of logwood to thirty-two ounces of water, boiled down to eight ounces, giving one ounce at a dose, with or without laudanum, as the case might require.

I am, Gentlemen,

Your obedient servant,

Bath, 17, Westgate Buildings, JOHN BARRET T
Oct. 14, 1842.

TREATMENT OF UNUNITED FRACTURE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—It not unfrequently happens, in cases of ununited fracture, even when treated in the most skilful manner, that the means employed will fail of bringing about a firm union, and a false joint is the consequence. The treatment of the following case, which proved successful, may, perhaps, be deemed worthy of attention, inasmuch as it combined an ancient practice modified by more recent improvements in surgery:—

J. T., aged forty-two, although given to intemperance, appeared not to have suffered any visible deterioration of health. On the 28th of March last he fell down, and fractured the tibia and fibula of the right leg. The medical gentleman who was called in at the time had him carefully conveyed home, and subsequently placed the limb on Liston's fracture apparatus. After having laid six weeks it was removed, and at the end of another month, being ten weeks from the accident, any attempt to use the limb, even by the aid of crutches, proved abortive, and was accompanied with an intense degree of pain.

At this juncture I was requested to see the patient. Upon examination, the fractured ends of the bones were found ununited, and the limb, when rotated, elicited a distinct crepitating sound. The tibia was fractured obliquely, occupying a space nearly midway between the malleoli and knee-joint. The want of union appeared to have had no connection with the state of his health, which seemed not to have suffered materially since the accident, but, in all probability, arose either from a want of a perfect coaptation of the fractured extremities, caused possibly by the interposition of muscular fibre, or from the restless conduct of the patient, causing displacement of the bandages whilst the callus was forming, and thereby disappointing Nature in her work.

After considering the various means usually resorted to in the treatment of such cases, the following was resolved upon:—The limb being firmly grasped with both hands, the fractured ends were made quickly, but not roughly, to rub upon each other, the action being continued for the space of two or three minutes. This produced a very considerable degree of pain, which was ill borne by the patient. The limb was then simply placed upon a pillow, and nothing more done till the following morning, when the same process of attrition was repeated, and continued on the two succeeding days. The ends of the bones were then adjusted, and encircled, herring-bone fashion, with strips of soap plaster, and an eighteen-tailed bandage applied, being previously well starched. Strips of linen, two or three times doubled, and about two inches in breadth, soaked in the same ingredient, were placed longitudinally on its outside and anterior aspect. The limb then received an additional support above and below by a wooden splint, the whole being ultimately secured with tapes. At the end of two or three days it became so completely encased that no movement of the patient could in any degree disturb the adjusted ends of the bones. The apparatus was not removed until the end of six weeks, when, upon examination, it was found that union had taken

place. The limb continued weak for a considerable time, and at the end of about ten weeks he was so far enabled to bear weight upon it as to allow of his crutches being laid aside, and walked with the aid of two sticks.

I remain, Gentlemen,

Your obedient servant,

W. C. WORTHINGTON,

Senior Surgeon to the Lowestoft Infirmary.

Lowestoft, October 24, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, OCTOBER 29, 1842.

Attention has recently been directed to the condition of the insane poor in Wales, by the publication of a letter from the pen of Dr. Hitch, resident physician of the Gloucester Lunatic Asylum. The thanks of the community are amply due to Dr. Hitch for his exposure of a state of things which are a disgrace to a civilised country—a blot which we sincerely trust will, ere long, be erased by the well-timed appeal of Dr. Hitch. From the information collected by the gentleman whom we have just named, it would appear that, in the counties of Anglesea, Carnarvon, Denbigh, Flint, Merioneth, and Montgomery, containing a population of 396,254 souls, there are 664 (306 males, 358 females) insane persons chargeable to the different parishes within those counties as “lunatic paupers.” This number, when compared with the population, gives about one pauper lunatic to every 596 of the whole population—about one male in 639, and one female in 560. The number of the insane amongst the other classes could not be ascertained; but, from the inquiries made by Dr. Hitch, it seems probable that in numerical proportion they are at least equal to their poorer brethren.

The actual numbers of the insane poor in the different Welch counties may be taken to be as follows:—

In Anglesea, whose

population is . . .	50,890,	there are 92, or 1 in 553
In Carnarvon . . .	81,068	146 555
In Denbigh . . .	89,291	105 850
In Flint . . .	66,547	62 1,073
In Merioneth . . .	39,238	101 388
In Montgomery . .	69,220	158 438
		664

These poor creatures are distributed and disposed of in the following manner:—

Males. Females. Total.

6	13	19	in English lunatic asylums.
17	15	32	in Welch union workhouses.
140	163	303	living with relatives.
143	167	300	living with strangers, or, more properly, “farned out,” at
306	358	664	various weekly sums, accord-

ing to the degree of utility they may afford to their respective masters.

The average cost of the patients differs according to their mode of distribution; and if we are to estimate the care bestowed on the lunatic by the sum of money expended for his keeping, many of these unfortunate creatures must suffer the utmost degree of privation.

The few who are in lunatic asylums cost their parishes, on an average, about 12s. per week; those in the workhouses about 2s. 3d.; those with their relatives about 2s. 8d.; those with strangers about 3s. 2½d. The highest sum allowed to a relative is 5s. 6d.; to a stranger, 7s. per week. Several are stated to be provided for upon the handsome allowance of 9d. per week; whilst a few are said to sustain existence on the sum of *threepence* weekly.

From the foregoing facts we can easily deduce the condition of the insane poor population of the principality of Wales. More than six hundred persons, deprived of reason, are scattered throughout the country, often living on the charity of relations, or on a pittance inadequate to procure even the necessities of life—without medical care or magisterial protection. The sufferings which they undergo are hypothetically described by Dr. Hitch; but past experience would lead us to think that his description falls short of reality.

“Many of the poor lunatics,” says Dr. H., “would, unavoidably, be under severe restrictions. Some would be deemed unsafe to the public and themselves unless securely chained to the wall or the floor of their contracted apartments. Some would be thought well enough treated if confined to a chamber, and their food and their clothing supplied to them through some narrow opening; others would enjoy the outhouse and the society of the lower animals. Light clothing and spare diet would of course be prescribed in all cases as proper to bring down the high state of mania, and those who were melancholic and depressed would be happy, indeed, if left to their own wretchedness, and not roused up to shake off their lethargy and low spirits. Some are said to enjoy their freedom, and to roam uncontrolled about the country, and such must occur where so many are so totally unprotected.”

To those who remember the condition of the insane poor many years ago, or have witnessed the wretched state to which they are reduced in some countries where no provision is made for their support or treatment, the above picture will not appear over-colored. But it may be asked, whence comes it that the condition of the insane poor in the principality of Wales is so deplorable? The answer is furnished by Dr. Hitch, who informs us that, with a single insignificant exception, there is not in the whole principality a lunatic asylum, either public or private, charitable or speculative. Some of the afflicted, indeed, are sent into the English asylums, but the transfer to what might be called a foreign country is anything but beneficial. The Welch poor are, universally, ignorant

of the English language, while the officers and servants of the English lunatic asylums are equally ignorant of the Welch. The inconveniences which arise from this circumstance are thus forcibly pointed out by Dr. Hitch:—

“When the poor Welchman is sent to an English asylum, he is submitted to the most refined of modern cruelties, by being doomed to an imprisonment amongst strange people, and an association with his fellow-men, whom he is prohibited from holding communion with. Nothing can exceed his misery, himself unable to communicate, or to receive communication; harassed by wants which he cannot make known, and appealed to by sounds which he cannot comprehend, he becomes irritable and irritated; and it is proverbial in our English asylums that the ‘Welchman is the most turbulent patient wherever he happens to become an inmate.’ In vain is it in these cases that the professional treatment is judicious—the moral humane—that the attendants are kind, or the locality cheering; suspicious, from the nature of his disease, and unconscious of the directions given him, he finds himself required to conform to the regulations of the establishment, which differ from his previous habits, and to submit to discipline for his own benefit, and he assumes all this to be so much insult and unkindness shown to him personally; and as he is not susceptible of an explanation to the contrary, he resents them with violence, and opposes them on the principle of self-defence. Then, again, as he cannot be approached by conversation, he loses those great advantages which, in well regulated asylums, are carried to a great extent, of personal communion with educated minds, who lead, direct, and control the wandering spirit of the lunatic, and bring it back, by insensible degrees, to his own guidance; he loses, indeed, all the advantages of the greatest of modern improvements in the treatment of the insane—judicious conversation with properly selected persons. It will not, then, be matter of surprise if the poor Welchman, after having undergone this species of solitary confinement in our English asylums, should leave it at least no better, and often worse, than when he entered it, and this, I believe, is usually the case.”

It is unnecessary for us to pursue this distressing subject further. The attention of the executive has, we believe, been directed to it, and we trust that an effort will soon be made to extend the benefits of a well-directed system of medical aid to the insane poor of the Welch community.

TREATMENT OF IDIOTCY.

Some experiments, recently made at Paris, seem to encourage the hope that persevering and well-directed efforts may considerably improve that most distressing of all mental conditions—idiocy. The experiments to which we allude were made by a young philanthropist, M. Seguin, who has devoted himself to the education and instruction of children laboring under idiocy. M. Seguin having proposed to demonstrate the effects of his method on a certain number of idiot children drawn from the public hospitals, his request

was supported by M. Orfila, and acceded to. Twelve children, of from eight to sixteen years of age, taken from the hospital of “Incurables,” were entrusted to his care; they were all in a state of idiocy, regarded as incurable. None of the children were able to read or write; several were incapable of speaking distinctly, stammering a few unintelligible words, or inarticulate sounds; others were epileptic, and three or four were subject to constant convulsive movements.

After the expiration of a year M. Seguin exhibited his pupils to a committee, composed of MM. Fouché, Halper, and Orfila. The children were carefully examined, and it was found that they were *all* able to read; many of them could copy writing, and almost all answered the questions addressed to them in a distinct and satisfactory manner. Some of the children were acquainted with addition, subtraction and even multiplication.

The physical condition of M. Seguin’s pupils was likewise considerably improved; and instead of being a burthen to the establishment, they were capable of executing various useful services.

These gratifying results will receive a more extended application. The authorities immediately directed that M. Seguin should continue his experiments on a large scale in the different hospitals, and that an adequate sum of money should be applied to the furtherance of his benevolent views.

REVIEWS.

The Anatomy of Sleep; or, the Art of Procuring Sound and Refreshing Slumber at Will. By EDWARD BINNS, M.D. London: Churchill, 1842. 8vo. pp. 394.

This is one of those wordy and worthless works which have been well described as treating “de omnibus rebus et quibusdam aliis.” We have looked through it in vain to discover the drift of the author, or a single grain of common sense in his lucubrations. If there be any truth in phrenology, Dr. Binns must possess a most outrageous organ of credulity. The whale that swallowed Jonas was nothing to him. The doctor would swallow not only “Pelion upon Ossa,” but the Alps upon the Pyrenees. He has evidently reckoned on a similar degree of gullibility in the public, for we had to wade through 391 of the 394 pages of mortal nonsense, which compose his book, before we found a syllable relative to his plan of procuring sleep, and, when found, we discovered that it was analogous to the French swindler’s receipt for killing fleas, which began thus—“You catch one vlea, and then”——

Report on the Chief Results obtained by the Use of the Microscope in the Study of Human Anatomy and Physiology. By JAMES PAGET. Churchill, 1842. 8vo. pp. 51.

We have to apologise to Mr. Paget for placing his excellent and practical work in juxtaposition with

the above, but periodical literature, like poverty, makes one acquainted with strange companions.

The object of the author of the present report is "to bring together, in the briefest possible space, the principal conclusions regarding the structure and functions of the several tissues of the human body, which have been rendered certain or most probable by microscopic investigation."

This object the author has fulfilled in a manner which is extremely creditable to his industry, impartiality, and accuracy. The report, which was originally published in Dr. Forbes' "Review," is now presented to the profession in a separate form, and at a moderate price, and we strongly recommend it to all our readers who are desirous of keeping pace with the progress of this interesting department of our science.

We take this opportunity of likewise recommending to the attention of practitioners an able and carefully digested report on "Some Points in the Anatomy, Physiology, and Pathology of the Blood," by Mr. Wharton Jones, also reprinted from the "British and Foreign Medical Review."

ACADEMY OF SCIENCES, PARIS.

October 10, 1842.

M. CIVIALE ON STRUCTURE OF THE URETHRA.

In this memoir the author examines the following questions:—What is the organic lesion which constitutes stricture?—what the effects of neglected stricture?—and what the inconveniences resulting from the modes of practice described in surgical works. The answers which M. Civiale gives to the above questions are—

1. It has been generally laid down, that stricture of the urethra depends on some accidental production developed on the lining membrane of the canal and diminishing its calibre, and it has been proposed to destroy this production. I have shown that instead of being seated in the lining membrane, the diseased condition exists underneath the mucous membrane, which remains healthy; hence, the usual modes of treatment adopted are faulty, inasmuch as they cannot reach the seat of the disease without destroying the lining membrane of the urethra.

2. Stricture was commonly supposed to occupy the membranous portion of the urethra much more frequently than any other part. I have shown that the disease is rarely, if ever, seated in the membranous portion, and, consequently, that caustics or cutting instruments should not be directed to this part of the canal.

3. Hitherto the same mode of treatment has been applied to stricture, without any regard being had to its seat; but I have shown that the mode of treatment should vary according as the stricture may occupy the meatus, the spongy portion, or the sub-public curve—the three most frequent seats of the disease.

4. The attention of surgeons has been chiefly directed to the alterations which take place at the strictured point itself; but I have shown that these are of

secondary importance, and that the changes which take place *behind* the seat of the stricture are infinitely more deserving the attention of the practitioner. These are chronic inflammation of the urethra, neck and cavity of the bladder, ulceration, abscess, infiltration of urine, dilatation of the membranous and prostatic portions of the urethra, and of the prostatic and seminal ducts; in a word, a long catalogue of affections implicating the prostate and neck of the bladder, and requiring the utmost attention of the surgeon, though too often neglected, for the original disease which occasioned them.

ELECTIVE ACTION OF REMEDIES.

M. Coze, Dean of the Medical Faculty of Strasbourg, communicated the results of experiments made by him with certain classes of remedies. The author concludes—

1. That volatile substances have a tendency to be eliminated by those organs which produce, during life, secretions of gas or vapor—viz., the lungs and skin.

2. That substances containing principles of the same kind as those which enter into the composition of healthy secretions, are eliminated by the organs of those secretions.

3. That substances which form part of the composition of an organ, if given as remedies, are carried to the organ to which they belong.

4. That of substances which have no analogues in the normal composition of the fluids or solids, a certain number obey what may be termed general chemical affinities; for example, acids are eliminated by the acid secretions, &c.

October 17, 1842.

M. RETZIUS ON THE STRUCTURE OF THE TEETH.

According to the author, the teeth of man and the mammalia are composed of three substances—viz., enamel, ivory, and cortical substance; these are also found in the teeth of several amphibious animals and fishes.

The ivory contains tubes and cells which communicate with each other, and are identically the same as the small canals and cells which constitute so important a part in the organisation of bones. The ivory tubes open towards the cavity of the pulp, in a radiated manner; several of them are, however, parallel, and they send out ramuscles on all sides extremely fine, forming numerous reticular anastomoses, and terminating in the cells. The thickness of the principal tubes varies from 1-400th to 1-1000th part of a line. As the tubes subdivide, this thickness diminishes, and the minute ramifications are much thinner. The cells and minute ramifications of the tubes finally disappear, but it is probable that those which appear under the microscope form only a small portion of what really exists in bone.

The ivory is deposited in layers round the surface of the pulp, the external layer being the one first formed, and so on. While this deposition is taking place, the external cells and the peripheral extremities of the tubes are formed; and as the successive layers of ivory are deposited, the tubes become continuous from one layer to another, in such manner that the successive segments of tubes form at last one uninterrupted canal. It would seem that the numerous parallel undulations of the tubes are occasioned during their passage from one layer to another. To

explain this, we must admit a periodical movement in the pulp, by which the nascent tubes are at one time carried towards the end of the crown, and at another towards the extremity of the root of the tooth. The finest and most numerous undulations depend on periodical movements of short duration; the more extensive ones are produced by changes in the situation of the pulp, which occur at much longer intervals. The mode of formation of the ivory is analogous to that of bone, and the similarity is greater than might at first sight be imagined; there is, however, this difference, that in the ivory of a tooth it is the external layer (*couche extreme*) which is first formed, while in bone the same layer is formed last around each medullary filament.

The organisation of the enamel is much more simple; it contains neither blood-vessels nor osseous tubes, but somewhat resembles in structure the crystalline lens. The enamel is probably nourished by imbibition of an organic fluid carried by the ivory tubes, and transmitted through a thin membrane, which probably surrounds the different cells. In some animals the formation of enamel is not confined to the dental follicle, but continues during the whole period of life, through the medium of a small annular apparatus, which envelops the root of the tooth.

The cortical substance exists in the teeth of most mammiferous animals, and even of amphibious animals and fishes. It is peculiarly rich in cells and osseous tubes, which are generally very irregular. In some animals (the elephant, horse, ox) it is formed principally inside the dental follicle, but in others it is formed, during the whole period of life, by the membrane which envelops that portion of the tooth enclosed in the alveolar process. The ivory, as has been said, is deposited in layers from within outwards, the most external being the first formed; the cortical substance, on the contrary, is formed in an opposite direction, the external layer being the one last deposited.

The memoir of M. Retzius was referred to the committee appointed to examine a memoir by Mr. Nasmyth on the same subject, which was read on the 3rd of October. Mr. Nasmyth's paper contained the results of his investigations on the structure of teeth, which are too well known in this country to require any notice here.

INTRODUCTORY LECTURE

AT THE

MANCHESTER ROYAL SCHOOL OF MEDICINE AND SURGERY,

By Mr. RANSOME,

Saturday, October 1st, 1842.

GENTLEMEN,—In the year 1824 was first tried, in the provinces, the novel and, in the opinion of some, the doubtful experiment of providing for the numerous students of medicine resident in this town, the advantages of regular and systematic courses of lectures on the essential and auxiliary sciences connected with medicine and surgery. The objects contemplated were, to diminish the expense of a lengthened residence at the distant metropolitan schools—the advantage of professional education being conducted and completed during the residence of the pupil under the roof of his

master or parents—to lessen the risk of exposure to the temptations of a city, while still under the eye of the latter—and, lastly, the vast saving of time, in being allowed to complete the requisite *curriculum* of lectures during the period of his apprenticeship. As these latter objects depended upon the regular recognition of the corporate bodies, in whom is vested the right of examination, some time necessarily elapsed before it could be accomplished; but it gives me great pleasure to be able to announce, that the requisite consent has now been given, in consequence of the highly creditable examinations passed by the pupils of the Manchester schools, as proved by the testimony of the secretary of one of these bodies before a committee of the House of Commons. The time saved by a pupil being enabled to attend the courses delivered in this school during a four or five years' apprenticeship, is not less than three years; which, with the consequent saving of separate expenditure at a distance from home for that time, forms an argument in favor of provincial schools capable of being appreciated by any one, particularly by the parents and friends of those destined for the medical profession residing in the provinces. The experiment has now been tried during eighteen years, and its success was attested by the increasing numbers who avail themselves of its advantages; and by the number of well-educated, skilful, and highly-respectable practitioners now settled in this town and neighbourhood, who received the first rudiments of their professional education in this school, who are now engaged in dispensing the benefits of medical science to the sufferers in these densely-populated districts, and who are still connected with their former teachers by bonds of mutual esteem. Let it not, however, be supposed, that its success was uninterrupted by anxious difficulties and fears; the powerful opposition of interested schools which had long enjoyed the monopoly of medical education, the withholding of privileges likely to interfere with them, and the consequent diminished advantage to the pupils in not materially shortening the time of residence elsewhere, operated to its detriment. But the merit of its pupils, creditable alike to their own industry and talents and to the zeal of its teachers, has at length received from the metropolitan colleges its due reward; and the readiness with which the necessary recognition was granted when the school had been subjected to the ordeal, and been found worthy, demands our warmest acknowledgments of their discretion and liberality. Among the discouragements must not be omitted the expenses of such an establishment, which, in the outset, considerably exceeded the receipts; but this circumstance proved no impediment to the continued exertions of the founders, who have persevered in their noble course unsupported by the grants of money from public and private sources, which have in other provincial towns testified the interest with which their efforts have been regarded by the public. What, then, must be the feeling of those gentlemen who first projected, and with unwearied energy have continued, their course, through good report and evil report, and who still survive to witness the success of their exertions? Most sincerely do I believe that, to them, their success in thus providing sound and scientific information for their pupils, and the subsequent beneficial application of it to the relief of suffer-

ing humanity, constitute their true reward. But as one of the first who experienced the advantages of provincial education in this very school, eighteen years ago, I should ill discharge my duty, were I to neglect this opportunity of testifying my gratitude, more particularly to the founders of this school, and, I may say, of provincial education generally.

To my former respected teacher and talented colleague, Mr. Turner, is to be attributed the design of a completely organised school of medicine. Previous to the year 1824, I believe in 1822, he delivered his first course, unassisted, on anatomy and physiology. Such was his success in this one important department, that he conceived the idea of associating together other gentlemen well qualified to teach the other branches of medicine and surgery. His first associate was that illustrious philosopher Dr. Dalton, whose invaluable discoveries are not even yet sufficiently appreciated, but whose zeal for the diffusion of the true principles of his favorite science induced him to take the chair of chemistry in this school. Though no longer associated with us in the active duties of teaching, the venerable philosopher earned and still retains the most heartfelt esteem of his former colleagues; and I know that you will respond to the earnest wish, that he may long be favored with health to enjoy the honors and rewards of an eminently useful life; and that his example may ever animate our endeavours to imitate his patient and unwearied industry, and disinterested search after truth. Subsequently, courses on the practice of physic and materia medica were given by Dr. J. L. Bardsley; on midwifery by the late Mr. Kinder Wood; and on surgery by my late respected father. The two latter, alas! are "gathered to their rest;" but their example is still valuable, as displayed in the zeal with which they embarked in the cause of education, undeterred by the fatigues of extensive and laborious practice, and by the indications of declining health, which ultimately terminated their useful labors. Since the last session, this school has sustained the loss of another of the founders by the retirement of Dr. James L. Bardsley, who has so long and so ably filled the chair of practice of physic. A few years ago he resigned the course on materia medica, in consequence of the increasing demands upon his time as a private practitioner. The same cause has interfered with his duties as teacher of medicine; and, while his colleagues rejoice at success so deservedly earned by his talents and industry, they feel sorrow at the retirement of one who has so eminently contributed to the success of the school. During the current year we have also to regret the loss, by death, of another colleague—Dr. Newbold; who, with a keen sense of honorable duty to his class, struggled with the disease which finally closed his career, soon after the termination of the last course on materia medica. Educated at this school, Mr. Newbold early evinced uncommon talent and zeal in the pursuit of professional knowledge. Though young in years when elected to the chair of materia medica, his former teachers with full confidence foresaw the success with which his abilities were rewarded, and have now only to regret that the unsparing hand of death has interrupted a career so promising. The increase of public and private duties has also caused the retirement of Mr.

Stott, for some years demonstrator of anatomy in this school, and formerly in Mr. Jordan's school in Mount-street. To both our retiring colleagues we give our best wishes, and hope that the mutual esteem which existed will remain unchanged and uninterrupted. To their successors—Dr. Chaytor, in the chair of practice of physic, Dr. R. F. Ainsworth, in that of materia medica, and Mr. W. Smith, as demonstrator of anatomy—we give a hearty welcome, and feel every confidence that the utility and dignity of their respective chairs will be maintained by their zeal and talents. Thus, of the original founders of this school, but one now remains; but in that one we still possess a host. The master mind which conceived the plan, the indefatigable spirit which persevered in the execution of it, yet remains to us, and will still continue to impart to his younger associates, and to the pupils, a portion of that enthusiasm which has supported him in his laudable career. To my early and steadfast friend, to my first public instructor, and to my present highly-respected colleague, Mr. Turner, I should be deficient in gratitude, were I to omit to pay this testimony to his merits, and to express a wish,—in which I am sure you will unite,—that he may long enjoy health and ability to continue his valuable services in the cause of medical education.

The lecturer then announced the order of study during the winter session, and enumerated the times of the introductory lectures to the courses of the respective lecturers. Addressing the students as to this *curriculum* of study, he urged on them ever to bear in mind that every faculty must be exerted and every study made subservient to the investigation, detection, and distinction of disease, and the application of the proper remedies; and that, therefore, their course of studies must be conducted and their faculties exercised with a systematic reference to these great objects. He divided the whole range of lectures into practical and subsidiary or auxiliary courses; including in the former the practice of physic, that of surgery, midwifery, diseases of the eye, and forensic medicine; in the latter, anatomy (with demonstrations) and physiology, materia medica and therapeutics, chemistry, general pathology and botany. He cautioned his hearers against the too prevalent impression of students, that all the information requisite for future practice could be derived from lectures, and dwelt on the importance of studying disease, where alone it could be properly studied, at the bedside of the patient. No doubt further improvement might be introduced, if, in addition to lectures, a well-regulated system of tutorship were adopted, as the daily regulation and examination of a student's progress would ensure more regular perseverance, and, from the facilities of correcting erroneous impressions, of which conversation admits, would constitute an important improvement in medical education. Of course, however, he reprobated the abuse of such an aid as exemplified by what are termed "the grinders" in the metropolis. He thought that the system of apprenticeship might be purged from its admitted gross abuses, and then its retention would be found to possess invaluable advantages to the student.

In reference to clinical study, he observed, that "Much of the success of this school must be attributed to the facilities for practical information af-

fording by the local institutions for the relief of the suffering poor, so munificently supported by our liberal townsmen. In the Manchester Royal Infirmary, Dispensary, and Fever Hospital, Eye Institution, Lying-in Charities, Dispensaries, Lock Hospital, &c., the pupil has opportunities, unequalled elsewhere, for becoming practically acquainted with all the ordinary, and many of the extraordinary, forms of disease; while the acknowledged skill and talent of the medical officers to whom these charities are intrusted, are a sufficient guarantee for the value of the knowledge of medical and surgical treatment which may be acquired from their practice." He condemned that empirical knowledge which some might deem the royal road to the mastery of the necessary professional information, and said that the time allowed for medical education was sufficient for the acquirement of the requisite scientific knowledge, if ordinary talent and industry were brought to the task. Mr. Ransome then proceeded to take a general glance at the relation of the subjects of the lectures to each other, and to the grand object ever to be kept in view—the prevention, detection, distinction, and cure of disease. In the course of doing so, he expressed his apprehension that the utility of the study of the minute anatomy of the tissues was not sufficiently recognised by students generally, so as to induce them to enter upon it with zeal. He warned the students against hastily adopting physiological hypotheses, but urged them rather to collect and generalise facts. When treating of chemical knowledge, the lecturer observed, that "the rapid progress of that department of chemical science which peculiarly includes subjects most interesting to the medical man—I mean organic chemistry—has opened a page of the book of nature, difficult, indeed, to decipher, but replete with most important consequences to medical science. The knowledge of the facts and principles of inorganic are essential to a right understanding of organic chemistry; but the medical student will not be required to follow out to its fullest extent the chemical peculiarities of the inorganic kingdom; but I do earnestly beg that you will pay sufficient attention to the second part of the course, to enable you to estimate the progress which the application of chemistry to physiology promises to ensure. Already has the controversy commenced; the master minds of the world are girding themselves for the conflict; and from the collision may truth be elicited."—Reverting to clinical lectures,—the instruction derived from which, he said, was invaluable, and yet was generally the most neglected by pupils,—he observed, that, "if examinations for degrees were conducted on the system adopted in Germany for their Staats examinations—viz., superintending the practical treatment of a few patients under the eye of the clinical professor for a given time, there would be few who would dare to neglect such a privilege."

In conclusion the lecturer said—"No time remains to consider the degree of preparation, the result of previous education, though this alone might advantageously occupy an hour's lecture. I am willing to take for granted, that you have enjoyed the average education which is usual in this country among those of your station. But I now ask, do you bring to your arduous task of acquiring the varied and complicated knowledge requisite for medical practitioners, a deep

sense of your responsibility, a firm determination to apply yourselves to your duty, a will and a power to command your attention, and address yourselves to the subject before you? Are you liable to be bound in the leaden chains of indolence, or to listen to the fascinating whispers of the siren voice of pleasure or dissipation? Have you well weighed the awful responsibility of your future position, that to you, as an instrument under Providence, will be confided the life and health of a child by its parent, of a wife by a husband? and are you prepared to adopt the only course which can support you in the trying scenes of domestic sorrow which certainly await you—viz., the consciousness of having neglected no means or opportunity of acquiring knowledge, and of exercising your judgment? Whatever motive may have induced you to enter the medical profession, whether love of science, expectation of utility, ambition, or hope of pecuniary advantages, none can be realised without energy and diligence. Nor must you be disappointed, if, after the most praiseworthy exertions, after gaining honorable distinction among your contemporaries in the school, the deserved success should not arrive so soon as you expected."

MODE OF CLEARING THE CATHETER WHEN OBSTRUCTED BY COAGULA.

By S. B. DENTON, Esq., Hornsea.

In retention of urine from enlarged prostate gland, I have often found it extremely difficult to evacuate the bladder on account of the coagula which plug up the apertures of the catheter. Nothing can be more vexatious, after we have overcome the difficulty often experienced in passing the catheter over an enlarged prostate fairly into the bladder, than to find that no urine flows off, and this may recur during repeated trials. The catheter is withdrawn, the clots of blood removed, and the instrument returned, but the result is the same; we are unable to relieve the bladder of its contents.

The above difficulty may, I apprehend, be completely surmounted by the following contrivance:—

I requested Messrs. Weiss and Son to make me a catheter, between the size of Cooper's prostate catheter and the one in common use, to fit on the cross-pipe of the stomach-pump. I fix the metal stand on the bottom pipe, the cross-pipe being adapted to the end of the catheter which projects from the urethra.

The metal stand is then immersed in a basin of warm water held by an assistant; the syringe is filled with the water, and a stream made to pass along the catheter into the bladder. On injecting the water, it will be immediately seen how perfectly and instantly this method removes the obstacle to the urine finding its way along the tube. Any foreign body stopping up the openings of the catheter can by these means be now readily removed, and the patient speedily relieved.

I have no doubt but that Mr. Weiss could readily contrive a smaller syringe with cross-pipes, which would answer the same purpose as the stomach-pump, and might be fitted in a case with a catheter so as to be very convenient for the pocket.

Oct. 20, 1842.

RETROSPECT OF THE MEDICAL SCIENCES.

ENLARGEMENT OF THE SPLEEN CURED BY PREGNANCY.

An anonymous writer has published a communication in the "*Bulletin Général de Thérapeutique*," in which he details several well-marked cases of engorgement of the spleen consequent on protracted or repeated attacks of intermittent fevers, which disappeared gradually on the supervention of pregnancy. One of the most interesting of these cases occurred in the person of a lady, forty-one years old, the mother of several children, who was attacked with tertian ague at the close of the winter of 1839. From this she was relieved several times by the methodic employment of the sulphate of quinine, but the complaint constantly returned as soon as the medicine was omitted. The patient had had five or six of these remissions, when she was seen for the first time by the writer of the communication, who, suspecting enlargement of the spleen, immediately examined the left hypochondrium, and discovered a considerable tumor in that region, the precise dimensions of which he could not ascertain. By the use of purgatives, large doses of sulphate of quinine, and abdominal frictions with the Neapolitan ointment, the fever was entirely cured, but the engorgement continued to the same extent and hardness as previously. While the physician was regretting the failure of his plan of treatment, his patient became pregnant, and, as time progressed, her health improved, her countenance lost its unhealthy pale hue, and became more animated, and the tumor in the hypochondrium underwent a marked diminution from the end of the fourth month. The case thus acquiring great interest, its progress was carefully watched, but unfortunately the development and ascension of the uterus towards the umbilicus prevented the complete performance of the necessary observations. After her confinement, which took place at the full period, and without any unpleasant symptoms, when the uterus had resumed its natural size, and thus allowed a perfect exploration to be made, the engorgement of the spleen was found to have disappeared entirely, and the organ could not even be felt, owing, probably, to the lax condition of the abdominal parietes. Similar cases are also recorded in the same communication.

The writer thinks it very probable that in the cases of cure of obstinate intermittent fever by pregnancy, which have been already published, an enlargement of the spleen may have existed, but not been discovered by the medical attendant; the cure being effected consequently by the pregnancy removing the engorgement of that organ, and thus, as it were, extinguishing the source whence the persistence of the fever was maintained.

The explanation offered of the *methodus medendi* refers to the great change wrought in the female constitution for a time by the state of pregnancy, the general state being characterised by a notable increase of the energy of plastic force, and by the almost exclusive direction of that force to the generative apparatus, thus, as may be readily conceived, causing to disappear a disease which solely consists in a passive engorgement of blood in an organ, which acts as a mere diverticulum for the general circulation. The

process is essentially vital, or an act of revulsion for the advantage of the diseased organ, effected by the plastic operation of which the uterus is the seat. By some it might be considered that the slow, gradual compression to which the abdominal viscera are subjected by the development and progressive ascent of the impregnated womb, may have some influence in causing the resolution of the enlarged organ, and it is possible that this explanation may be to a certain extent correct; at all events, the influence of this mode of compression cannot be altogether denied; but it must not be forgotten that a marked diminution of the spleen was noticed, before the uterus had acquired a size capable of exerting pressure on that organ.

The pregnancy that has supervened on protracted intermittent fever, with or without engorgement of the spleen, has in every case followed its usual course, and the children have presented the characters of healthy infants born at the full term. In three of the cases recorded in this paper, symptoms of general plethora showed themselves at different periods, requiring the performance of venesection once in two of the patients, and twice in the third instance.

As there are certain constitutional diseases, such as phthisis and cancer, the course of which is only suspended, not arrested, by pregnancy, the writer of the article under notice, thinking a relapse not impossible, although he has not hitherto observed it in his patients, adds an advice certainly not required by British dames. He recommends that the mothers should suckle their offspring, and thus maintain a supernumerary function, which may, in the same manner as did the pregnancy, exert a favorable revulsion on the tissue more or less deeply engaged in the disease.

STATIC LUNG TESTS.

Dr. Guy, of King's College, published an elaborate communication, in the "*Edinburgh Medical and Surgical Journal*," some time back, on the static lung test, his observations being then drawn from foreign and domestic sources. He has since written a communication on the same subject in the "*Lancet*," the authorities for which are the essays of Mr. Taylor in "*Guy's Hospital Reports*," the paper of Dr. Brady in the "*Dublin Journal of Medical Sciences*," and certain cases occurring within his own experience. The facts noticed amount to thirty-three in number, and all have reference to children at full term, without distinction of sex, and in whom the lungs were ascertained to be healthy. The maximum weight of the lungs before respiration was ascertained to be 1480; after respiration, 1203; the minimum weight before respiration, 510; after respiration, 510; and the mean weight before respiration, 707; after respiration, 820. From this it would follow that the absolute weight of the lungs of children who have respired exceeds that of mature still-born children by one-seventh only; but as the latter are larger, and their lungs proportionally heavier than those of the former, the real increase of weight is about one-fourth, instead of one-seventh.

From the preceding facts, and from the tables published in the "*Edinburgh Medical and Surgical*

Journal," it results that the process of respiration, when recently established, increases the weight of the lungs by about one-fourth, and when it has continued one month or less, the average increase for equal weights of body is less than one-half. These weights and this increase are very remote from the rough estimate, which has made the weight of the lungs before respiration about one ounce, and after respiration about two ounces. The ascertained weight before respiration is nearer two ounces than one; and the increase, even when respiration has continued a considerable time, is less than one-half, instead of being equal to the weight assumed for the still-born.

From the trifling average difference between the weight of the lungs before and after respiration, it must necessarily happen that the number, from which they are respectively derived, must often coincide, in which case the weight alone could not give any assistance in solving the question of respiration; and when we reflect that, in the majority of doubtful instances of infanticide, respiration is not likely to have continued many minutes, and that, consequently, but little addition could have been made to the weight of the lungs, we can have little hesitation in summarily rejecting the absolute weight of the lungs as a test of respiration.

The fact that the bodies of still-born children are heavier than those of children born alive, while it impairs still more the value of the test of the absolute weight of the lungs, imparts a relative importance to Ploucquet's test—the comparison of the weight of the lungs with that of the body. From the three cases which led Ploucquet to recommend his test of respiration, it appears that the proportion which the weight of the lungs bore to that of the body before and after respiration respectively, was 1 to 70, and 1 to 35, proportions much more favorable than those established by later observers. Dr. Guy gives the maximum before respiration as 1.24, and the minimum after respiration 1.132. His conclusions are drawn from the tables published in the "Edinburgh Medical and Surgical Journal." He considers Ploucquet's test to be much superior to that furnished by the absolute weight of the lungs; for "whereas there were only eight instances in which the maximum weight of the lungs after respiration exceeded the maximum weight before respiration, there are no less than twenty-nine instances in which the proportion which the lungs bear to the body is greater after respiration than before—that is to say, there are twenty-nine instances in which, assuming the proportion 1.24 to be the true maximum, we could state with certainty that respiration had taken place. On the other hand, there is only one instance in which the proportion of the lungs to the body is less before respiration than the least proportion observed in children born alive; in other words, there is only one case recorded in which, assuming 1.132 to be the real minimum after respiration, we should have been justified in asserting that respiration had not taken place."

Ploucquet's test, while it admits of occasional application, can never be necessary where other and more simple means are at hand to determine the same question beyond the reach of doubt or cavil. These means Dr. Guy promises to point out in a future communication.

CONCRETE NAPHTHALINE IN PSORIASIS.

Dr. Emery, of the hospital St. Louis, had his attention turned to the investigation of the different products of tar as remedial agents in the treatment of skin diseases, on account of the successful results he obtained from the use of tar, and because of the unpleasant odor it gave forth. Various preparations were had recourse to, the most valuable of which proved to be the concrete naphthaline, which Dr. Emery tried in fourteen cases. In two cases, one of psoriasis gyrata, and the other lepra vulgaris, it failed in effecting any good; in the remaining twelve it proved more serviceable. Eight of these were men and four women. In two of the cases, lepra vulgaris of from fifteen months to two years' duration, arsenical and iodic preparations had been previously tried; in the younger patient the arsenic at first seemed to do good, but the improvement soon ceased. An ointment prepared with two scruples of concrete naphthaline to thirty of lard was applied, causing the scales to fall off, leaving the skin of a violet color, with white circles around. A perfect cure was effected in six weeks, and although three months have passed since, there has not been any relapse. In four other cases the men were laboring under inveterate psoriasis; in one of them it had existed sixteen years, and had resisted arsenical, iodic, and mercurial treatment. The tar ointment was had recourse to, and with decided advantage, but the man becoming impatient on account of his business, an ointment of naphthaline, twice the strength of that used in the preceding cases, was spread on compresses, and applied over the diseased parts night and morning. The man was cured in six weeks. When the ointment was applied too strong, it caused a burning heat, which was soon removed by emollient baths and poultices. The other six cases were also instances of psoriasis cured by the naphthaline ointment. Dr. Emery states that this remedy has an unpleasant odor, which soon passes off, and it is apt to irritate the skin and cause erysipelas, if it be not carefully watched.—*Bulletin de Thérapeutique*, July, 1842.

CEREBRAL SOFTENING.

Dr. Durand Fardel has published several cases to prove the curability of cerebral ramollissement, which he considers to be due in every case to local or general vascular congestion of the brain, a conclusion he draws from the consideration of the symptoms and the anatomical lesions proper to the acute ramollissement; the consecutive effects of the chronic disease also corresponding to the results of inflammatory action developed after primitive vascular congestion.

Cerebral ramollissement, according to Dr. Fardel, is curable at two different periods of its existence; at its commencement, when the tissue is not so disorganised as to prevent its return to the normal state, nor the cerebral functions to their primitive integrity, and again at a later period, when the disorganisation of the nervous pulp is arrested, and the part undergoes a process of induration or cicatrisation analogous to the mode of cure of apoplectic clots. In the first case, a complete removal of the anatomical lesion and of the symptoms which indicate its presence, may be effected; in the second, the pathological change will continue, as will often also a certain degree of alteration in the encephalic functions. In the last-named

cases, the term cure is applicable in the same manner as it is under similar circumstances in cases of cerebral hæmorrhage.

In support of these views, Dr. Fardel has placed several cases on record, in which the symptoms during life corresponded with those of ramollissement of the substance of the brain. The first case occurred in the person of a woman, forty-eight years of age, who had always passed a very active but poverty-stricken existence. The disease commenced in her with giddiness, severe and continuous headaches, and occasional loss of consciousness, which was sometimes attended with want of muscular power in the limbs. From these attacks she generally speedily recovered, but they left a degree of weakness behind them. In the commencement of January, 1842, however, a severe attack of giddiness, unaccompanied with insensibility, was followed by permanent and rapidly increasing paralysis of the left side. When Dr. Fardel saw her, the left arm was perfectly paralysed, but there was still some slight motion in the lower extremity, which was the seat of severe pain; the mouth and eyes were drawn permanently to the right side; the tongue could be protruded straight; speech was difficult, and the voice monotonous; at times the patient seemed to hesitate for words, and be unable to express her thoughts; the irides were scarcely influenced by light; the right side was totally unaffected, and the general functions were performed correctly.

This attack had been coming on for a twelvemonth previous to this development in all its violence. The treatment was antiphlogistic and counter-irritant; the repeated methodic application of leeches behind the ears, &c., moderate purgatives, blisters to the nape of the neck, sinapisms to the wrist, &c., were the measures chiefly employed, and by their continued use the headaches were removed, the speech and intellect became perfect, the pains in the limbs were dissipated, the paralysis was so far cured, that the patient could walk upwards of a league without much fatigue, and the motions of the left arm were restored to their natural condition, the fingers only remaining weak.

This case Dr. Fardel considers, in the absence of proof of pathological lesion, to be well marked by the symptoms as one of cerebral softening, nor does he think that the persistence of a degree of weakness in the fingers of the previously paralysed limb should prevent its being regarded as an instance of cure of the ramollissement. The nervous pulp was in all probability too far disorganised to admit of its being restored to its normal condition.

The next case recorded is one in which Dr. Fardel states there were signs of former softening arrested by treatment, and afterwards cured by cicatrisation. It occurred in the person of a woman, seventy years of age, who died in the Salpêtrière of disease of the heart. A few days previous to her death she showed signs of cerebral affection, such as hallucinations, strange remarks, insomnia, spasmodic twitchings of the forearms and face, and subsultus tendinum, symptoms which M. Prus, the physician to the institution where she had been long a resident, stated to have shown themselves several times previously, accompanied by exaltation, delirium, stiffness, and spasmodic action of the limbs without paralysis. Leeches to

the neck had generally removed these symptoms in a short time. On examination of the body, there was found acute superficial ramollissement of the convolutions of the brain, which were injected and infiltrated with blood, and covered here and there with small yellow patches; in the cortical substance there were found the remains of chronic ramollissement, consisting in the transformation of the cortical layer in a kind of yellow, thick membrane, covering small cavities with dense greyish vascular parietes, filled with a liquid like milk of lime. These cavities are regarded by the essayist as proofs of cure of chronic softening—that is, of a cure as far as it can be effected the part being too much diseased to admit of its restoration to its primitive condition.

The third and last case is one where the symptoms of ramollissement were removed by a careful antiphlogistic treatment, leaving a degree of weakness and numbness in the limbs that had been paralysed, with occasional severe pains about the joints, and a sensation of weight, rather than pain, in the head. For these the patient would not submit to further treatment, as she did not like the successors to the physicians at the hospital, under whose care she had been placed.—*Ibid.*

FRACTURE OF THE CRANIUM.

A man fell from a second floor on his head, and became immediately insensible. When taken to the Hotel-Dieu, there was a slightly contused wound on the left parieto-temporal region, and a trifling hæmorrhage from the ear of the same side. The limbs were strongly contracted, and there was loss of sensation of the upper extremities; the muscles of the right side of the face were also contracted, those on the left were paralytic both of sensation and motion; the right eye was affected with convergent strabismus; the tongue could be protruded straight; the breathing was difficult and slightly stertorous. The symptoms increasing in severity, and the right side becoming paralytic in the course of two or three days, an exploratory incision was made over the left parietal and temporal bones, where the bruise was. Two fissures were discovered circumscribing a depressed portion of bone. The trepan being applied, and two pieces of bone removed, the depressed portion was raised, and some clots of blood removed. The dura mater was incised, but no blood followed. A third application of the trephine was made above and behind the ear, and on the removal of the piece of bone, a gush of venous blood followed, but soon ceased. The man died in eight hours.

On examination of the body, besides the fissures of the left parietal and temporal bones, there was found a fracture of the base of the cranium, the petrous portion of the left temporal split into two pieces, as also the body of the sphenoid and the ala major on the right side. The lateral sinus on the left side had been slightly wounded by the trephine, and was the source of the venous hæmorrhage. There was much effusion of blood at the base of the brain; the left facial nerve was torn; the fifth pair of the same side passed over the fractured portion of the temporal bone, and was compressed by the coagulated blood, which filled up the cavernous sinus, thus explaining the cause of the paralysis of motion and sensation on

the left side of the face. The common motor oculi nerve of the right side passed over the fracture of the sphenoid :—was this the cause of the strabismus?—*Gazette Médicale.*

COLLEGE OF SURGEONS.

We have heard, from an authority upon which we can rely, that an important alteration is about to be adopted by the council of the College of Surgeons, in the regulations affecting candidates for the diploma of the college. It is said that a certain class of practitioners will be admitted to examination between this and the 1st of January next, without being compelled to present any testimonials or certificates whatever of medical education. At the time of our going to press (Friday afternoon) nothing definitive had been determined; but, if our information be correct, some change of this kind would be adopted at the meeting of the council on yesterday evening.

HYDROPATHY.

M. Scotoutten, of Strasbourg, has received a commission from the French government to visit the hydropathic establishments of Germany, and report on the real merits of the modes of treatment therein practised.

PROMOTIONS AND APPOINTMENTS.

October 25, 1842.

28th Foot—Benjamin William Marlow, to be assistant-surgeon.

71st—Assistant-surgeon James Johnson, M.D., from the staff, to be assistant-surgeon, vice Carr, who exchanges.

Hospital Staff—Assistant-surgeon George Carr, from the 71st, to be assistant-surgeon to the forces, vice Johnson.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, October 21, 1842.

W. D. Marchant, C. Wrixon, W. H. Hole, J. A. McDonogh, J. J. Horton, J. Lancaster, R. Bunce, E. Hadduck, H. Hill, C. Bond, W. E. Taylor, R. W. Woolcombe, J. Gerrard, W. M. H. Day.

APOTHECARIES' HALL.

Licentiates admitted Thursday, October 13, 1842.

J. W. Beresford, Macclesfield; W. E. Taylor; W. Fraser, Sunderland; H. S. Lyford, Winchester; W. Sewell, Bowness; J. Corrie, Thornton, Bradford; S. S. Perkins, Exeter; T. Ager, Castle Hedingham.

BOOKS RECEIVED.

A System of Practical Surgery. By William Ferriusson, F.R.S.E. With 246 illustrations. London: Churchill, 1842. 8vo. pp. 596.

On Injuries of the Head Affecting the Brain. By G. J. Guthrie, F.R.S. London: Churchill, 1842. 4to. pp. 155.

The Anatomy of Sleep; or, the Art of Procuring Sound Slumber at Will. By Edward Binns, M.D. Churchill, 1842. 8vo. pp. 394.

Clinical Midwifery, with the Histories of Four Hundred Cases of Difficult Labor. By Robert Lee, M.D. London: Churchill, 1842. 8vo. pp. 224.

Observations on some Points in the Anatomy, Physiology, and Pathology of the Blood. By T. Wharton Jones, F.R.S. Churchill, 1842. 8vo. pp. 24.

Report on the Chief Results obtained by the Use of the Microscope in the Study of Human Anatomy and Physiology. By James Paget, Churchill, 1842. 8vo. pp. 51.

An Account of Askern and its Mineral Springs. By Edwin Lankester, M.D. Churchill, 1842. 8vo. pp. 152.

Food, and its Influence on Health and Disease, &c. By Matthew Truman, M.D. London: Murray, 1842. 8vo. pp. 240.

Retrospect of the Progress of Medicine and Surgery for the Year 1841-2. By Mr. E. O. Spooner and Mr. W. Smart. Blandford: Shipp. London: Whittaker and Co., 1842.—[This production is very creditable to the industry and judgment of the authors.]

The Visitor's Guide to Bournemouth and its Neighbourhood, &c. Second edition. London: Whittaker and Co., 1842. 8vo. pp. 152.—[An entertaining account of a watering-place situate in the south-west extremity of the county of Hants; to which is appended a well-written dissertation on the climate of Bournemouth, by Dr. Aitkin, of Poole.]

LITERARY ANNOUNCEMENT.

Early next week Mr. Renshaw will publish a new work by Mr. Forbes Winslow, entitled, "On the Preservation of the Health of Body and Mind." The principal portion of this work has relation to the early symptoms and treatment of insanity.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

F. B.—We beg to decline the communication, being unwilling to share the honor of publication with a periodical which, hitherto at least, has been of very doubtful reputation.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET,
CAVENDISH SQUARE, LONDON.

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COURSE OF CLINICAL LECTURES, DELIVERED AT THE MIDDLESEX HOSPITAL. BY DR. WATSON.

Lecture II.—October 22, 1842.

When last I had the pleasure of addressing you, I mentioned that I would take the present opportunity of submitting some hints and suggestions respecting the mode of best ascertaining the true character of disease, when it presents itself for your investigation—the most judicious and satisfactory method of investigating and of recording its progress and results; and this shall be the last occasion on which I shall deviate from the exact plan I have laid down, of confining my observations strictly to a consideration of cases which occur in this hospital, and under your own eyes. I have said in my former lecture, and I now repeat, that it is of the very greatest importance that, in every instance, you should be quite sure of the seat and nature of the disease which presents itself for treatment. This most vitally important information we acquire through the symptoms, collected in part from our own observation, partly from what our patient tells us of his feelings and sufferings, and, in some instances, from the statements made to us by his relatives or friends. I need scarcely say, that of the information derived from those three different sources, that from our own observation is the most trustworthy and important. You should be aware that, as those personal observations are collected by our natural senses, the latter require to be educated, to be improved, quickened, and perfected by education. The touch of the experienced surgeon has been termed, and very appropriately termed, the *tactus cruditus*, or educated touch, which is, in delicacy of perception, far beyond the ordinary and natural power of that sense. The touch, the eye, the ear of the physician, should be an educated touch, an educated eye, an educated ear. From those senses, thus trained and accomplished, much power of observation is acquired, much is learned. I need not dwell on the importance of the touch, how accurately it reckons the beating of the pulse, how delicately it admeasures the size and form of affected parts. The ear should be quick and distinct, as well in catching the words in which the patient seeks to disclose his ailment, as in detecting the action of the lungs. A good deal also may be learned during the interrogation of the patient, as well as previously and subsequently to that interrogation, by close observation of the eye. When, even in the first instance, the disease is submitted to your inspection, when you enter the sick chamber, or the patient's entering room, you may gather much infor-

mation from your observation of his face, his figure, his attitude, and sometimes his mode of walking; if the face be flushed or pale, sunken or bloated, the features calm or distorted—if the figure be enlarged or attenuated, the attitude constrained, the gait unnatural and uneasy—from all or any of those appearances you may deduce much immediate information.

It is related of Pinel, that immediately on entering the sick chamber, and solely by looking on his patient's face, he could discover latent pneumonia and inflammation of the peritoneum. This I should consider doubtful, and the inferences so arrived at rather conjectural than certain. From the sense of smelling, too, something may be learned. Dr. Christison says that, by the smell alone, on entering the sick room, you may determine whether the urine be albuminous or not; and in very many cases I believe you may. There are many diseases in which appearances present almost unerring indications; a pale, flabby countenance indicates internal hæmorrhage; the blue lip reveals the existence of disease within the chest. In the same way, a sunken eye and hollowed cheek in cholera give plain intimation of the disease. Jaundice you recognise as soon as you see it. The same may be said of all eruptive diseases, particularly those of a febrile character, such as scarlatina, which impart their proper distinctive marks to the skin. In the same way you may judge by the strength or debility of the patient; sometimes even by his gait you may be led to a proper inference as to the seat of disease, and sometimes, as I have already observed, his attitude will help you to a conclusion. Thus, if you see, on entering the chamber, the object of your observation sitting up, bending forward, and supporting himself with his arms on the bed, you will most probably find that he labors under some affection of the thorax; if, on the other hand, you find him frequently lying on his back, having his knees gathered up, with a manifest unwillingness to change his posture, or if he lie on his side, having his flexed knees close up to his body, you will fairly infer that he labors under inflammation of the abdomen. Many similar appearances, with the inferences to be deduced from them, will suggest themselves to you while walking the wards.

With respect to interrogating the patient, there is much perplexity in ascertaining the best mode of doing so, in order to elicit useful information. On this point a variety of directions has been given, and some of them by no means calculated to lead you aright. To be instructed how to examine by interrogatories in the first instance, is a matter of much importance. This sort of examination should be brief but comprehensive. It should not occupy much length, for it should be so conducted as to save your own time, which must frequently be of material

moment, and to avoid fatigue to the patient, which may be in many cases of the very first importance. There are many cases which must constantly recur in which it will be most desirable that the patient should not be subjected to a long course of questions, which may lead to unnecessary and injurious excitement and irritation. Let me instance pulmonary hæmorrhage, inflammation of the lungs, where slight exertion would be followed by great exhaustion; in those cases very serious injury may be produced by long talking. Again, in affections of the brain everything should be carefully avoided that would require exercise of that organ, and also in febrile inflammation, where any great demand, or continued demand, on the attention must conduce to increase of the symptoms. In such cases, therefore, your questions should be few as possible, not protracted so as to weary and excite the affected organ. There are several other reasons why your examination by questioning the patient should not be tedious or lengthy, but on those other reasons I do not so much insist; those which I have particularised seem the most cogent, and of themselves show to conviction the necessity of adopting a concise mode of oral investigation. It must be remembered that a good bold inquiry is most valuable, most essential. It gives the patient a confidence in you, and consequently a readiness to comply with your directions, an anxiety to second your efforts so far as he can, and a hopeful trust in your skill and attention, of the advantage of which I need not speak. Be assured that patients distinguish, promptly and keenly distinguish, between an examination conducted judiciously, boldly, directly, and, to use an expressive phrase, in a workmanlike manner, and one conducted tediously, confusedly, circuitously, in an unworkmanlike manner. Your examination by interrogatory should, therefore, be a short and conclusive one. You must not, however, mistake me, in thus enjoining a brief examination, as recommending a superficial one. Quite the contrary; I advise conciseness, as leading to clear answers—a brief, but a bold, direct examination, as being not only the most satisfactory to yourself and the patient, but as also the most efficient examination. In your first questioning of a patient, you may range over too great a space; you may search for information of trivial or of no importance. This I would have you avoid. Many books, purporting to advise you on this head, suggest a mode of inquiry most tiresome. They direct you to omit from your inquiries no circumstance at all bearing on the condition of the patient. Such a course would be, in my mind, frequently tedious and annoying. There are many questions suggested in those books which would be quite unimportant in some cases; and where questions are unimportant, to put them to your patient is not only useless, but unwise.

Rostan, who has written a work on clinical medicine, suggests that the best question to put a patient, on commencing your interrogatory examination, is, whereabouts the ailment lies, where the affliction is felt? I do not always commence my examination in this mode—as many of you may remember, I often have put the question, “What is the matter with you?” or “What ails you?” And you may have found that, when I asked this question the answer I obtained was vague, unsatisfactory, and conveying no information.

But if we ask the question “whereabout,” or where the patient feels affected, we generally obtain from the answer some definite information—we generally obtain some clue to the true seat and character of the disease. It must, however, be remarked, on this point of patients’ replies to professional inquiries, as is very truly observed by Rostan, that patients are very prone to miscall the several parts of their body, and that therefore you must not always be content with their verbal reply to your question “whereabout,” as in many cases your reliance on their answers may altogether mislead. Most patients call what is known to us as the epigastrium, their chest; all that portion of the body which lies between the pubes and the ribs is known to us as the abdomen—a term which is, of course, unfamiliar to the generality of patients; but they have a strong objection, particularly females, to call it by its ordinary familiar and proper name—the belly; they will uniformly miscall it the stomach.

A case suggests itself to my recollection, which shows how strangely erroneous notions are prevalent, particularly among the humbler classes, as regards the localities and proper names of several parts of the body. A boy, who was under treatment for mumps, complained to me that one of his kidneys was swelled. I was rather astonished, because there was no apparent cause for such a swelling, nor any other symptom indicative of the kidneys being disordered; neither could I suppose the boy to be acquainted with the interior of his own structure and the precise situation of his kidneys, or able to distinguish whether such a swelling existed or not. I therefore desired him to place his hand on the part affected, when he put his hand on one of his testicles. You will often find it advantageous, and indeed necessary, on receiving the patient’s reply, to adopt the additional precaution of making him put his hand on the part in which he complains of being affected or pained. The Irish, almost uniformly, if you ask them what ails them, or where they feel affected, will reply, that they have a pain in the heart; and this is the sure answer, no matter what may be their ailment or disease. Sometimes you will be told of an all-oversness, or something equally vague and unsatisfactory. It is, therefore, a good rule to follow up in most cases your question of “What ails you?” and “Where do you feel affected?” by a careful inspection for yourself of the part indicated.

Another question which will be generally useful is, how long the patient has been ill; the answer to that question will tell you whether the disease is acute or chronic. Here again, however, the answers of patients are apt to mislead; for they usually date their illness from the time when they have been actually laid up, or when they have been compelled to cease from usual employment or labor. If, then, you find their reply means only that they have been stayed from work, or have kept their bed for a certain time, you must inquire, and endeavour to ascertain how long before that period of so being constrained to abandon their work, or of having taken to their bed, they had felt any pain, inconvenience, or unusual sensation or affection. Your other questions will follow in order, as the particular circumstances of each case will require. As to the mode of examining the several parts of the body, I must reserve my observations and directions

for other occasions when you have the patients before you, and my words can be accompanied by demonstration. Any suggestions I could make here on this head would be necessarily lengthy, and, after all, calculated but little to impart accurate instruction.

With respect to the mode of recording cases coming under your notice, I have promised a few hints as to the method which will be, in my opinion, the best to be observed. Most persons have methods peculiar to themselves of making memoranda and taking notes of such matters as seem deserving particular attention. You probably have, each of you, a method peculiar to yourselves, and which may in most cases fully answer your purposes, if you intend them only for your own recollection and information. But if the record of cases be, as in your subsequent practice it must often be, required for the information of others, as in the case of a consultation with professional brethren, or of a judicial inquiry, you will find the utility, nay the necessity, of having some certain, general, uniform plan of recording your observations, so as to make them properly and instantly available on reference. I have found most serviceable a plan laid down by Dr. Andrew Duncan, when I was attending lectures in Edinburgh and seeking knowledge under his valuable instruction. He advised us to have our memorandum or case-book divided into four heads, applicable to every case, and to arrange our observations under each of these four heads in this manner:—The first division related the actual condition and circumstances of the patient when first examined; the second division recorded the symptoms; the third the progress and history of the disease; the fourth the causes. This plan I can recommend for your adoption, as having myself experienced the convenience and other advantages of it. Under the first head—that of the condition and circumstances—you place the actual condition and circumstances of the patient at the time of your first professional examination—that is to say, the age, the sex, and, if a female, the state of the uterine functions, whether married or not, if pregnant or not, if she be a mother, or a nurse, then the station in life, the trade or occupation, which you are all well aware has great influence in either engendering disease, or in creating and fostering a tendency to it. In some cases, too, it will be of importance to note the dwelling-place, as it may be that the patient's abode was exposed to malaria from its situation, or to the influence of contagious diseases from its density of population and other causes. Under this same head you will also note, as accurately as you can ascertain, the previous habits, of the influence of which in originating or nourishing disease you are fully aware. These are the chief things to be noted under your first division—to repeat them again, the actual circumstances, age, sex, uterine functions, station in life, trade, or occupation, habits, and place of abode.

Under the second head—that of the symptoms—you should note the most important symptoms that present themselves. And here you must remember that you should not under this head enter into a historical relation of the disease and its successive symptoms, but state the actual condition at the time that you first examine the patient, all that you learn from the information given by others, all that you see, or

feel, or hear yourself, what the patient tells you of his own feelings; it is to be observed, however, that the patient's account is generally exaggerated or ill-expressed; besides these you will also note all the principal functions—that is, their actual condition at the time. You may then go back into the historical inquiry, and under your third head endeavour to note accurately the progress of the disease from its commencement, the time of its first appearance, and its manner of appearing. Then you should extend your inquiries into the causes, and note under your fourth head such circumstances as you may consider the immediate or predisposing causes of the present disease. It will not be always enough to trace back only to the first manifest assault of the disease under consideration; you should go further back, and inquire whether the parents or other relatives were subject to any hereditary disease, or whether the patient himself had at any time previous, and at what time previous, to the present disease having made its appearance, labored under any other disease, and what that disease was. To mention one instance of the propriety of this inquiry, you must have frequently seen how important it is in diseases of the heart to ascertain whether the patient had been previously attacked by rheumatic fever. The analogy extends to very many other complaints. You must also take note of the effects of such remedies as may have been previously employed.

These are the chief hints I purposed submitting to you, regarding the mode of investigation and of recording the result of your inquiry and observation. You will extend and perfect them by your own practical experience. I now proceed to the ordinary and regular business of this course, and shall say a few words upon two cases which have presented themselves latterly in this hospital to your notice. In my former lecture I said, that I would generally bring forward those cases in which death had occurred. One such case has occurred since last we met here, and on that case I shall make a remark or two. It is not a very uncommon or very instructive case, but there are some points in it to which I think it desirable to draw your attention. It is that of Mary Andrews, a young woman, aged 23, unmarried. She entered the hospital on the 30th of August in the present year. She was anasarcaous, having swelled legs and thighs, and some enlargement of the abdomen; she had been so affected for nine weeks previously; during that period the catamenia had been suspended; she suffered from a slight cough, had a tendency to faint often, and vomited all food, either sooner or later after eating. We examined her urine to ascertain whether it was albuminous or not, and found it did not contain any albumen whatever. I found that her complaint was disease of the liver. The liver could plainly be felt, hard and firm, particularly towards the right hypochondrium. I made inquiries into her previous habits of health, and learned that twelve years before her feeling the present attack she had had an attack of jaundice, and five years before the same period an attack of acute rheumatism. After the last-named attack she had felt frequently palpitation of the heart, with shortness of breath. In almost every report made of her case in the book I find, from first to last, that she vomited all food. Over this no

medicine that I could think of, no treatment that I could direct, exercised any control, and on the 17th of this month she died. On post-mortem examination the kidneys, as I anticipated, were sound—there was no disease of the lungs—no organic disease of the heart; but the cause of her death was evidently disease of the liver, which was exceedingly large. Here are two portions of the liver; you perceive it is of a pale yellowish color, presenting a waxy appearance to the eye. It is a remarkable specimen of what is called cirrhosis or fatty liver, which is itself a very curious disease, and one of which we do not as yet know much. This liver is full of fat, or grease; a small portion being cut off fed a lamp, and burned itself after the wick was exhausted. Another portion cut out, floated upon water, whereas healthy liver, as you know, sinks in water. It is inordinately large, of a smooth, uniform color and appearance, not speckled, as if the blood had deposited any colored particles in its course. In general the fat of this kind of diseased liver is much softer than the fat of a healthy liver. In the healthy liver, Mr. Bowman has ascertained, by microscopic examination, that in each of the globules of which the whole mass consists there are found a few minute granules of fat. The disease of fatty liver arises from a great increase of those granules in both number and size.

This disease is a very common accompaniment of phthisis. Louis relates that of every three cases of death from consumption, one has been found attended with fatty liver. Of 49 cases of cirrhosis which he had recorded, he states that 47 were cases of death from consumption, and 223 other cases supplied the other 2 instances. In the case now before us, all sustenance was rejected by the constant vomiting, and this vomiting I take to have been caused by the pressure of the enlarged liver on the stomach; there was no other apparent explanation. The cause of this disease in the human subject is unknown. I do not know whether this enlargement of the human liver is similar to that diseased enlargement caused, by a very cruel practice, in the livers of geese, which are confined within a very narrow space and in darkness, and there supplied with large quantities of rich food, until the liver becomes diseased, greatly enlarged, and possessed of that particular flavor for which it is by epicures prized. I know not whether the diseases are in any degree similar; but certainly this female was not subjected to any such mode of treatment.

The other case, on which I would address a few words, is that of another patient in the hospital, who is afflicted with a very interesting disease, diabetes. I allude to the case of Thomas Rawson, who was admitted on the 19th of last July; at that time he used to pass an immense quantity of urine, and this was strongly impregnated with sugar. He stated that he was in the habit of passing six quarts of urine in the twenty-four hours, and in the hospital he has frequently passed, within that period, a good deal more. In this case it was highly important, if possible, to ascertain the date of the commencement of the disease, which is usually very difficult. He stated, in reply to my questions, that he began to be dreadfully thirsty about four months before, and that before and after his urine had been very copious. Dr. Crouch has suggested a mode of approximating to the time

when the presence of sugar in the urine commenced, by endeavouring to trace back to the time when it plainly contained nitric acid, contending that if you ascertained that time, you may be assured that then there was no sugar in solution in the urine. The patient answered, to questions put to him with this view, that two years before his urine had been scanty and contained small gravel, by which description I understood him to mean nitric acid. The disease had probably, therefore, been making way since that period. He continued, after admission, to suffer from extreme thirst; he had a good appetite and no symptom of diseased kidney. It was quite plain that his disease was diabetes—a strange and intractable disease. In fact it was quite plain that sugar was held in solution in the urine. Its taste was sweetish, it left discolored spots on his trowsers, and he stated that he had had three or four pairs of trowsers destroyed, having been saturated with a liquor, in appearance like chalk and water, which was undoubtedly caused by the involuntary trickling of his urine, the sugar of which crystallised spontaneously. On examining, as you perceive by this instrument, the urine is found to exceed considerably ordinary urine in specific gravity. Here are two specimens of sugar obtained from his urine by evaporation, both fair specimens, but one much finer than the other. You perceive the crystals are more like the sugar of grapes than that produced from the sugar cane. Here is a bottle of alcohol obtained by distillation from the urine, not of this patient, but of another, a female who was similarly affected. But I have no doubt alcohol could in like manner be obtained from the sugar of this man's urine. It is, as you see, much lighter in color than that of other and healthy persons; it is manifestly sweet, as you may readily ascertain if you choose to taste for yourselves, and its specific gravity is much greater than that of ordinary urine. I have found, also, a faint, sickly, sweetish smell from his breath, and this is one of those instances in which the presence of disease can be distinctly ascertained by the sense of smell. About two years ago I was asked by a professional acquaintance to visit a gentleman by whose case he was somewhat puzzled. Immediately on entering the gentleman's chamber I perceived the sweet sick smell, which instantly informed me that sugar was present in his urine, and, though the physician certainly was not at all previously aware of it, it was clearly a case of diabetes, and the patient died very shortly after. The urine of a diabetic patient is supposed to be deficient in urea; but I rather am of opinion that urea is not absent, but that the sugar obscures the urea, which is abundantly held in solution. I think it also certain that sugar is contained in the blood of diabetic patients, although it is not easy to detect it there, because the system is anxious to throw it off, and this anxiety explains the inordinate quantity of water discharged. The quantity discharged by this patient is considerable. A healthy person passes from one to four pints in the twenty-four hours; this man has, since his admission, passed more than double that daily; the largest quantity evacuated in any twenty-four hours has been so much as seventeen pints; the least, within the same period, nine pints. The specific gravity of his urine, taking that of water at 0, has varied from 30 to 48; or taking

that of water at 1,000, his may be set down at from 1,030 to 1048. The specific gravity of common urine is 23 or 24, taking that of water at 0; or 1,023 or 1,024, taking that of water at 1,000; that is, when the urine is not of a very low specific gravity, as in diuresis. The average specific gravity of this man's urine we may put down at 1,040. Dr. Henry has published at the commencement of his well-known work, tables showing the quantity of solid matter contained in urine of various degrees of specific gravity. Taking the specific gravity of Rawson's urine at 1,036, which is the average, and the daily quantity at fourteen pints, which is also the average discharge, we find, by Dr. Henry's table, that he has been passing away in urine one pound and a quarter of solids every day. When we consider this we can easily account for the loss of strength in diabetic patients, and even for the loss of virility which is generally the consequence. This is one important point for our notice, for it shows why this disease is so often accompanied by phthisis. You will find that phthisis is very generally an attendant on diabetes, though this is not necessarily the case; and I have examined four or five bodies of diabetic patients who had no symptoms of phthisis. I much fear, however, that in the case to which I have been referring, this too general accompaniment is about to manifest itself. Within the last three or four days I find that the patient has begun to be distressed by a short choking cough, and that his breathing has become very suspicious. I have learned, too, that last night he showed a tendency to spit blood, and altogether I fear that the common result is approaching, and that he must shortly sink beneath constant exhaustion.

Neither our observations on this case, nor any published cases, afford much instruction in showing where the disease resides. It is not disease of the kidneys—this has been, I think, satisfactorily ascertained. I have had in my professional career frequent opportunities of seeing diabetes, and have examined a good many bodies of diabetic patients, and never have found the structure of the kidneys diseased. They have been enlarged, presenting the appearance of having been overworked, but not of any organic ailment. The presence of sugar in the blood leads to the inference that it is to be found in the digestive organs, and this inference has been corroborated by experiment. Mr. M'Gregor, of Glasgow, relates that he had a diabetic patient who submitted himself to the following trial:—Mr. M'Gregor administered, three hours after each had had a full meal, to his patient and to another person, an emetic; it took effect on each, and he placed the matters vomited up in separate vessels, with a quantity of yeast; both fermented, but the matter vomited by the diabetic man much more so than that of the other person. This was not very conclusive, so he varied the experiment. He kept both individuals for three days wholly on roast beef and water, substances which do not contain sugar; no saccharine matter, therefore, was introduced into their stomachs. As before, at the end of the three days, three hours after their meal of roast beef and water, he administered emetics, and again subjected the matter vomited by each to the trial by yeast, when he found that the matter vomited by the healthy or non-diabetic man did not ferment, while

that rejected by the diabetic patient did, as he terms it, ferment very briskly, showing that, as sugar was not introduced, it must have been present in the digestive organs. He found also that the fæces of his diabetic patient fermented in a similar manner, and that when analysed they contained crystals of sugar—another proof of the presence of sugar in the digestive organs.

As I have said, the causes of this very extraordinary disease are extremely obscure. It is sometimes hereditary in certain families. In my private practice I have had in one family, until recently three, at present two, children patients, for one has died, all the three of whom have passed sugar in their urine.

As to the treatment to be pursued to effect a cure, I fear I have nothing very valuable to communicate. Your first object must be to correct, if possible, that tendency or condition of the digestive organs, by which so much of the food taken is converted into sugar; your next—to prevent as much as possible the introduction into the stomach of anything containing sugar, for if you can succeed in having a certain portion of the food taken converted to its proper destination, you may keep your patient for a length of time free from much inconvenience. It will be most important to keep your patient as much as possible on animal food, which contains no sugar, and, thereby, you will diminish the means and the tendency to the creation of sugar in the system. It is certainly very difficult to confine patients to animal food; they become tired of it, and will too often break through your restrictions. The child to whom I have just now alluded was the best patient I ever had; she liked animal food, was confined almost exclusively to it, and consumed an incredible quantity of it. It agreed well with her; occasionally she took creosote; she grew, became fat and stout, when suddenly she sunk under an obscure affection of the chest. Opium too, is, in this disease, a valuable medicine, when judiciously administered; it calms and appeases the irritation of the affected parts, and has a very sensible effect in diminishing the quantity of urine and of sugar held in it. Carbonate of ammonia is also recommended; I have never tried it. Acetate of lead is another medicine used. The warm bath will often be found very advantageous. By making your patient perspire freely you greatly relieve the organs affected. However, your chief reliance must be on the supply of proper diet; you must limit your patients in quantity of drink, though you will find them absolutely tormented with thirst. I need scarcely say that all drinks containing sugar in any degree should be prohibited; warm animal broths will be the best drink. Steel will, from its fine tonic properties, be found very serviceable in restoring the dilapidated system and strengthening the blood. You must, of course, vary those remedies as circumstances may require. Blood-letting is sometimes efficacious, and Dr. Satterly and Dr. Watt recommend it in every instance. I am persuaded that too much importance has been attached to blood-letting in this disease, though I think it may be found useful at the very commencement; and at other periods of the disease it may sometimes be used to relieve uneasiness of the epigastrium, or pains of the loins. More valuable instruction I fear I

have not to impart on this extraordinary and fatal disease. Fatal I much fear it will speedily prove in the case of the poor man now in hospital, on which I have addressed to you those few remarks.

COURSE
OF
LECTURES ON ORGANIC CHEMISTRY,
AS APPLIED TO
MANUFACTURES AND AGRICULTURE.

By M. PAYEN, Member of the Institute.

LECTURE III.

PRESERVATION OF TIMBER.—MANURE.

Cost of the Various Articles employed in the Preservation of Timber—Pyroligneous Acid and its Compounds—Sulphates, &c.

Nutrition of Vegetables—Assimilation of Carbon, Hydrogen, and Nitrogen—Humus—Theory of Manuring—Physical and Chemical Properties of Soils—Lime—Pyrites—Dried Blood.

GENTLEMEN,—Having, in my last lecture, explained to you the various methods employed for the preservation of timber, I shall now make you acquainted with the relative cost of the different materials so employed. The following numbers express the quantities of substances required to penetrate a beam (of oak, poplar, &c.) 18 to 21 feet long, and $11\frac{1}{2}$ inches in diameter.* The pyrolignites are preferable to every other kind of salt, on account of their cheapness, and because they invariably contain an excess of creasote. The pyrolignite of iron obtained in forests is cheaper than the pyrolignite manufactured at a distance from growing timber; but as the former contains less creasote, the value of both is nearly the same. For example, the pyrolignite of iron manufactured by MM. Bobec and Lemire, at Choisy-le-Roi, marks 15° with the areometer, while that of forests generally marks 5° . Hence, 200 pounds of the forest pyrolignite at 5° , and costing 1s. 3d., will furnish the same results as 66 pounds of manufactured pyrolignite, which marks 15° , and costs about 2s. 8d. The price of the pyrolignite of lead found in commerce is much higher than that of the material just mentioned; 10 pounds are dissolved in 200 quarts of water, and the cost of the preservative solution amounts to 3s. 1d.

Pyroligneous acid, marking 7° with the areometer, has also been employed in the preservation of timber; 80 pounds are required, at a cost of 3s. $2\frac{1}{2}$ d.

Tar water, or, what is still better, the ammoniacal fluid resulting from the distillation of coal, and which is abundantly obtained in gas manufactories, may be employed in the proportion of 50 pounds; this gives a cost of 3s. 1d. for the preservative fluid. The bichloride of mercury is too costly a material, as I have already remarked, to be extensively used. Its action is very powerful; the quantity required is 0.8 of a pound, but this gives a cost of 8s.

To saturate a beam of timber, of the dimensions already given, with a solution of sea salt, would, likewise, cost about 8s., 50 pounds being the quantity requisite.

* The experiments which form the base of these calculations were made on 120 to 130 feet of timber; the mean results alone are given. Fresh timber absorbs 0.25 to 0.60 of its weight of fluid by forced imbibition.

Sulphate of zinc, the price of which is very valuable, has been employed in the proportion of 10 pounds. The sulphate of iron may also be employed in the same quantity; but when the timber has been saturated with the latter, it must afterwards be submitted to the action of oil, to prevent the decomposition of the sulphate into sulphuric acid and oxide of iron. The cost of the material is 8½d.

Many other substances are employed for the purpose of staining timber of different colors. Thus we obtain an ebony colored wood by first treating the timber with a solution of pyrolignite of lead, and then with a solution of the sulphate of sodium. The quantities are—

Acetate of lead	$\left\{ \begin{array}{l} 643 \\ 1394 \end{array} \right.$	quarts.
	2037	quarts. 10 pounds.
Sulphate of sodium	$\left\{ \begin{array}{l} 201 \\ 290 \end{array} \right.$	quarts.
	491	quarts. $2\frac{1}{2}$ pounds.

The above numbers signify that to make 2037 quarts of the solution of acetate of lead, we must employ 10 pounds of that salt; and $2\frac{1}{2}$ pounds of sulphate of sodium for 491 quarts of its solution; that 643 quarts of the lead solution should be combined with 201 quarts of the solution of the sulphate, or 1394 quarts of the former with 290 of the latter. When a solution of the prussiate of potass has been introduced into timber and a solution of the sulphate of iron, we obtain a most beautiful Prussian blue color, which may be rendered still more brilliant by the addition of a small quantity of chlorine. The proportions are—

Ferro-cyanate of potass	$\left\{ \begin{array}{l} 666 \\ 1632 \end{array} \right.$	quarts.
	2298	quarts. $10\frac{1}{2}$ pounds.
Sulphate of iron . . .	$\left\{ \begin{array}{l} 840 \\ 675 \end{array} \right.$	quarts.
	1515	quarts. $6\frac{1}{2}$ pounds.

In like manner, if a solution of sulphate of copper is passed into the timber, and then a solution of ammonia, we obtain a very fine sky blue color; this mixture penetrates wood very readily. A solution of arsenious acid with a solution of acetate of copper gives a fine green tint, which becomes deeper on the addition of a small quantity of caustic potass. By varying these processes we can give wood a great variety of colors; but it is unnecessary for me to dwell any longer on this subject.

I shall now, Gentlemen, turn to the important question of the influence of manures on vegetation; but first allow me to say a few words on the nutrition of plants. Physiology, assisted by organic chemistry, teaches us the difference which exists between the mode of nutrition of plants and animals, and also points out the origin of carbon in plants, and the manner in which carbon, hydrogen, nitrogen, &c., are assimilated by them.

Vegetable growth takes place through the assimilation, by roots and leaves, of certain principles already prepared for plants by the hand of nature; while in animals different organs are required to operate certain changes in alimentary substances, and convert them into principles adapted for their nu-

trition. The moment we take up the theory of animal respiration, or endeavour to explain the assimilation of carbon by plants, we see at once that these questions embrace two of the most wonderful operations of nature—essential and effective causes of animal and vegetable life, which pursue an uninterrupted course, and will persist until the end of time.

One of the phenomena now alluded to is the constant proportion of oxygen contained in atmospheric air. When we reflect on the immense quantities of carbonic acid which are constantly being poured into the air which surrounds us,* we are naturally astonished at finding so feeble a proportion in the atmosphere and led to ask whither it goes—whence the constant proportion of oxygen contained in air at every period of time and in every country in the world? These questions are resolved by vegetable physiology. Plants possess the wonderful property of decomposing the carbonic acid contained in the atmosphere, and assimilating its carbon, and for each volume of carbonic acid thus reduced they yield an equal volume of oxygen. All doubt upon this point has been removed by the most accurate experiments, and it is now ascertained that the leaves and green parts of all plants absorb carbonic acid and exhale equal volumes of oxygen gas.† The air, then, contains the principal element of vegetable life, under the form of carbonic acid; water, also, contains another element, hydrogen, which we find on analysis in the cells of plants; and here I may mention that the tenacious matter of wood is more rich in hydrogen than is the celluline, a fact which explains why the best timber for burning is that which contains the greatest quantity of tenacious fibre; it also furnishes the greatest portion of acetic acid.

As I have already remarked, carbon is the element which is found most abundantly in vegetables. It is derived from the air. What, then, it may be asked, is the use of *humus*, which the earlier physiologists on the one hand, and agriculturists on the other, were in the habit of considering as the chief element of vegetable nutrition? For a long time the opinion prevailed that vegetable life depended exclusively on the formation of carbonic acid, and that this principle was furnished by the decomposition of humus; but modern researches have proved in the clearest manner the important influence exercised by nitrogen on the life and growth of the vegetable kingdom.

In the first place we may observe that nitrogen, which exists in more or less quantity in all vegetable cells, is essentially the *organising* principle, whereas the organised matter, the vegetable frame-work, or celluline, is composed of carbon, hydrogen, and oxygen only. The vegetable cell, in its earliest stage of formation, the embryonic envelopes and radicles, contain a considerable quantity of nitrogen. When submitted

to combustion these parts of plants, like animal matter, give out ammonia, which may be recognised by the alkaline vapor turning to blue reddened turn-sol paper; whereas pure celluline when burned gives out an acid vapor (pyroligneous acid). Humus, then, although derived from the decomposition of vegetable matter, can only be useful as a manure, in so far as it may contain a proportion of nitrogen; and the latter is principally furnished to plants in a state of combination with ammonia.

Rain-water always contains a small quantity of nitrogen; the rain which falls during summer, and particularly during thunder-storms, contains a larger proportion. M. Liebig has proved that, under the circumstances just mentioned, rain-water contains a protoxide of nitrogen in solution; and it is now well known that the “war of elements,” indicated by the roar of thunder and the flash of lightning, gives rise to combinations of azotised substances which are transmitted from air to earth for the support of the vegetable kingdom. These storms are more frequent in summer than in winter; in warm more so than in temperate climates; they are particularly frequent in countries where the vegetation is excessively rich and the forest trees of immense magnitude. The hard wheat (*tritium durum*) of Africa, contains more gluten (an azotised substance) than the corn of more temperate climates. In a word, we cannot refuse to admit the connection between nitrogen and the nutrition of plants, or the great value of this substance as a principle of manure, without rejecting one of our most rational theories, founded on conclusive experiments and the results of experience.

Before I proceed to the more immediate subject of my lecture, it will be right to say a few words on the physical and chemical constitution of soils. We may remark in the first place, that the soil is a repository for the most delicate organs of vegetables; it should, therefore, be neither too compact nor too much broken up; neither too acid, nor too alkaline; earth slightly alkaline is, however, favorable to vegetation, and the good effects resulting from the mixture of a small excess of lime, even with calcareous soils, are well known.

The barrenness of some pyritic soils depends on the presence of a certain quantity of free acid; the sulphuret of iron which they contain is decomposed, and the acid destroys the roots of everything planted in them. Here the nature of the soil may be corrected, as is done in Picardy, by neutralising the acid with lime, and the opposite tendency may be corrected by the use of pyritic earth. Daily experience proves to us the injurious effects which result from the neighbourhood of manufactories giving forth acid vapors; the effects are often felt by the vegetable tribe at a distance of fifteen or twenty miles; it has also been observed, that the presence of too much carbonic acid in the air is injurious to plants; on the contrary, manufactories of ammoniacal products, or those which emit vapor containing nitrogen, exercise a beneficial influence on vegetable life.

These, and many other facts which I need not enumerate, prove that nitrogen is the principle on which the value of manure chiefly depends; and at the head of such manures I would place *dried blood*, an article extensively introduced into commerce during the last

* Each individual consumes 453 cubic feet of air in 24 hours, for the purposes of respiration; 58-112 cubic feet of oxygen are consumed during the combustion of half a ton of coal.

† It is a remarkable fact, which must have struck the notice of the least attentive observer, that the whole surface of such plants as are naturally deprived of leaves generally presents a green color; certain species of the cactus, &c., for example. The color depends on the presence of a peculiar matter, which seems to exercise an important influence on the respiration of plants.

years. Blood, when dried and reduced to powder, is of a reddish-brown color, very insoluble in water, and decomposes slowly, one of the essential conditions of good manure. If fresh fluid blood were applied to the roots of a plant, the rapid disengagement of ammonia would burn them up; but when mixed with a large quantity of water, and distributed by irrigation, it is one of the richest manures that can be employed by the agriculturist.

To prepare the blood, it is mixed with about one-eighth of water, and placed in a large boiler, heated by a coal fire, or, still better, by steam. The mass is stirred from time to time until the albumen is coagulated, and when this is completely effected, the blood is placed in sacks and submitted to powerful pressure for the purpose of expelling the serum; the mass is then dried in large vats by exposure to air. By mixing with it a certain proportion of carbonaceous matter, it acquires a tendency to undergo decomposition very slowly.

DIAGNOSIS OF INDIAN AND ENGLISH CHOLERA. CASE OF SPASMODIC CHOLERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL
JOURNAL.

GENTLEMEN,—The remarks made by your correspondent, Mr. West, on the letter you did me the honor to publish in your Journal of the 8th of October, relative to the diagnosis of English and Asiatic cholera, were, I think, neither called for by the letter nor the spirit of my communication, in which I stated "I had no desire to impugn the correctness of your very respectable correspondent's observations," as I was quite confident he would not publish anything he did not believe to be strictly true. My object was a purely scientific one, wishing to direct the attention of the profession to a most important subject, my mind having been turned to it by the perusal of Mr. West's cases. I must disclaim any intention to treat your correspondent with discourtesy, much less to insinuate that he would knowingly publish anything incorrect. Having thus endeavoured to set myself right with Mr. West, I will take leave to add a few additional remarks to my first communication.

There are three forms of cholera met with in this country—cholera biliosa, cholera flatulenta, and cholera spasmodica; the first common, the second rare, the last not infrequent, and often attended with dejections distinguished by an absence of bile, either from the circumstance of the extension of the spasms from the duodenum to the biliary ducts, shutting up the secretion in its receptacle, the gall-bladder, or from a washing out of the alimentary canal by the first evacuations, followed by an arrest of the hepatic secretion, as a consequence of the exhausted energy of the organic system of nerves. The first and third varieties are unquestionably the same disease, differing only in degree, the last owing its intensity to the concentration and more intense operation of the cause or causes which give rise to it.

With due deference to your correspondent, Mr. West, and other gentlemen who may think with him, I believe those isolated cases reported as Asiatic

cholera are not true specimens of the pestilential Asiatic cholera which spread so fatally in many parts of Europe, and in this country, in the years 1831-32, and which is the disorder universally understood by the appellation of Asiatic cholera, but the spasmodic cholera, as it appears frequently in temperate, but more often in intertropical, climates. Indeed, since the two varieties, the biliosa and spasmodica, have been from time immemorial known to occur both in temperate and intertropical countries, and occasionally so severe as to prove fatal, the term Asiatic can only apply to the pestilential variety of the disease.

That that variety of cholera now denominated spasmodic has been often observed in this country, as well as in other parts of Europe, for a very long period, medical literature sufficiently testifies. The epidemic described by Sydenham, as far back as the year 1669, was clearly of this kind; it was also well known to Cullen. Both these distinguished physicians describe it as occasionally destroying life in the short space of twenty-four hours.

The more I reflect on the subject of symptoms, the more I feel convinced of the little dependence that ought to be placed on the nature and appearance of the matters ejected from the alimentary passages, as distinguishing spasmodic from true Asiatic cholera.

The early medical writers paid too little attention to the nature of the animal fluids generally, and were not sufficiently acquainted with them to justify the moderns in placing implicit reliance upon their descriptions; and their vague notions of bile and biliary diseases are calculated to strengthen the doubt which cannot but arise in the mind from this view of the subject; but, if there be any faith to be placed in their statements on this head, there is to be found in their remarks sufficient to justify the opinion that the cholera they described was often accompanied with discharges from the stomach and bowels very different from bile. Cullen, who is the great authority for the bilious nature of the discharges, admits that they are not always so. Sydenham, in his account of symptoms, expresses himself thus equivocally—"Vehement vomiting, and difficult and painful dejections of ill-conditioned fluids." Celsus, on the same subject, observes, "*Bilis supra infraque erumpit; primum aquæ similis, deinde ut in eâ recens caro lota esse videatur; interdum alba, nonnumquam nigra vel vavia.*"*

As far as my observations enable me to judge, the alvine discharges, in cases of English cholera morbus, consist of a thin watery fluid, more or less, or scarcely at all colored with bile; indeed, it has appeared to me that the effect of the morbid cause upon the mucous membrane of the alimentary tube is analogous to a full dose of elaterium, and the evacuations not very dissimilar. But, prior to the occurrence of the true Indian cholera amongst us, the attention of medical men was not, I believe, sufficiently directed to this subject.

Even if the alarming reports of the nature and fatal tendency of the Asiatic cholera had not preceded its arrival in Sunderland in 1831, the peculiarity of its symptoms and course, with its astonishing attendant mortality, could scarcely have failed in soon convincing British practitioners that they had a disorder

* Lib. iv., sect. 11.

to cope with essentially different from its prototype of their own country. Its mode of progression from the East, through Persia and the Russian empire, and across the North of Europe, in its course to this country, obviously little influenced by atmospherical agency—appearing in a most extraordinary manner in certain localities—marching, as it were, regularly on, yet in a way that could not be readily traced—often proceeding in opposition to the course of the prevailing winds, and unchecked by the most intense cold—and then disappearing without any obvious cause—clearly mark it as a disease *sui generis*.

Without going further into detail, these are features so discrepant from a few isolated cases of severe or fatal cholera happening during the prevalence of an epidemic diarrhœa, after a period of unusual elevation of the atmospherical temperature, that it might be reasonably inferred that, however similar in appearance, the diseases are in reality of a very different nature; and such is the opinion of the first medical authorities on the subject. Dr. Copeland, who says, "It is often difficult to distinguish between the varieties of true cholera," observes, that "the pestilential disease which has been very generally viewed as a form of cholera, is very different in all its relations;" and Dr. Billing gives the weight of his testimony to this view of the subject.

If this opinion be not assented to, it must be shown that the Asiatic pestilential cholera, as it appeared in England in 1831-32, is identical with the common English cholera morbus, differing only in degree, through the agency of some occult modifying circumstances, and also that the former, by the same mysterious influences, may occasionally lay aside its most characteristic peculiarities, and mix itself up with common autumnal bilious diarrhœa, and capriciously disappear with that disorder on the approach of winter.

The subject of epidemic diseases is, confessedly, obscure; and if the relations of the different varieties of cholera be a question yet to be decided, it is one not only fraught with great interest to medical men, but of paramount importance to the community at large, and is well deserving the attention of the government of the country.

I think I cannot more appropriately conclude this communication than by adding the notes of a severe case of spasmodic cholera, which has just occurred in my practice, and which I believe will be found illustrative of the foregoing observations.

I remain, Gentlemen,

Your obedient servant,

THOMAS SALTER.

Poole, October 24, 1842.

CASE.—Mr. Hunt, master carpenter, about forty years of age, complained, on Sunday evening, October 16, after a journey into the country, attended with some fatigue, of great uneasiness of his stomach and bowels, with a feeling of distension; his bowels acted twice or three times during the night, with some relief of the pain. On the following Monday and Tuesday he had diarrhœa, and felt much indisposed; he, however, was able to attend to his business, and did not take any medicine. He felt somewhat better on the Wednesday, and had a good appetite to his

dinner, yet the diarrhœa continued. About four o'clock in the afternoon of this day he was attacked with cholera; the symptoms becoming alarmingly violent, I was hastily summoned to his assistance, at six o'clock, p.m. I found him suffering greatly from spasms of the muscles of the chest and abdomen, and also of the extremities, both upper and lower, but more especially the calves of the legs. The expression of the countenance was anxious; respiration short and interrupted; the temperature of his body much below the natural standard; the extremities cold, especially the feet; but I did not observe any increase of depth of color beyond what might have been expected from the state of collapse in which I found him; there were no areola around the eyes or mouth; the pulse was exceedingly feeble, and 120 in a minute. Previous to my seeing him, he was reported to have vomited very freely a watery fluid, and to have had frequent and copious fluid dejections from the bowels; but, as these had been removed, I had no opportunity of seeing their nature; but I was shown some matters that had just been thrown off from his stomach, consisting chiefly of his undigested dinner, in which potato was most conspicuous. Supposing that there might be more of a similar nature in his stomach, I directed him to drink freely of warm water, to clear that organ before he took his medicine; the tongue was clean, and he complained of great thirst. An anodyne fomentation was directed to be applied to the bowels, and bottles of hot water to the feet, and he was to take a dose of a cordial mixture, containing a quarter of a grain of muriate of morphia, every two hours.

I saw him again at eight o'clock, and learned that he had vomited freely, and that the bowels had acted several times. I was shown two-thirds of a panful of a watery fluid, having a little frothy, bilious matter floating on its surface, which had passed from the bowels since my former visit. On pouring this off into another vessel, there was observed some quantity of white fecal matter at the bottom of the pan; he had taken two doses of the mixture, one of which was again returned; he felt easier, but was still greatly distressed with cramps; his countenance showed much suffering; the temperature and pulse continued the same; he complained greatly of cold. A sinapism was directed to be applied to the abdomen, and a pill, containing two grains of opium and two of calomel, to be taken every two hours until he was relieved.

My next visit was at ten o'clock; excepting that he had not been sick, the symptoms were but little changed—nothing had passed his bowels.

I again saw him at half-past twelve, a.m., on the 20th, when he appeared much relieved, having in a great degree recovered his heat, and the pulse was more developed (110), but he still suffered a good deal from spasms. He was to have a pill containing one grain of opium and one of calomel in two hours, and afterwards to continue the mixture first prescribed, if the symptoms did not again become severe; in that case he was to resume the use of the calomel and opium.

Ten, a.m. Still very much better; slept several hours since my last visit; vomited one dose of the mixture; had one small alvine evacuation, watery

and slightly tinged with red; besides this he occasionally has trifling mucous discharges from the bowels, as he lies in bed, which he is either unconscious of or has not the power to restrain; reaction is now completely established; his skin is hot, considerably above the natural temperature; pulse full, easily compressed, 120; veins on the back of the hand turgid; tongue white; he continues to complain of much thirst; still has spasms, and is somewhat sick; the spasms are trifling to what they have been; urine scanty and high-colored. He was ordered to take a saline effervescing draught with eight minims of a solution of the muriate of morphia every three hours.

Eight o'clock, p.m. Has been regularly improving through the day; slept several hours, and has had some diaphoresis; pulse 96, soft.

21. Ten, a. m. The patient is much better this morning; I found him sitting up in his bed-room dressed in his usual clothes, not looking very much injured from the severe attack he has sustained; pulse 80; thirst less; the tongue not so white as yesterday; bowels have acted twice, once at three o'clock in the morning and again at seven; the first evacuation was not preserved, the last was tolerably large and formed, *free from bile, and of a clay color*, not differing from the alvine discharges of confirmed jaundice; urine copious, of a light straw color, evidently free from bile also; the secretory function of the liver is obviously for the present *suspended*.

The diet hitherto has consisted of oatmeal gruel and arrow-root; he is now allowed mutton broth in which rice has been boiled.

The following draught was ordered to be taken every four hours:—

Mercury with chalk, five grains;
Compound ipecacuan powder, four grains;
Acacia powder, one scruple;
Water, an ounce and a half.

Ten, p.m. Complains of slight soreness of his gums, and of pain beneath the angles of the inferior maxillary bone; on examining the mouth, it is obvious that the mercury has produced its accustomed influence, which is rather extraordinary, as this must have happened previous to his taking the hydrargyrum cum creta, for before that he had taken only three grains of calomel; it would seem that it had exerted its entire operation on the mouth, or at any rate the clay-colored evacuations from the bowels show, that it did not affect the hepatic secretion; passed a comfortable day; no sickness or cramps; pulse 80, soft; tongue cleaner; no stool.

22. Noon. Complains only of slight weakness; slept well last night; pulse 80, and firmer; bowels have not yet acted, but are quite easy; urine deposits a copious lateritious sediment.

Ten, p.m. Has been very comfortable during the day; makes no complaint; pulse 62; tongue clean. As the bowels, though easy, continue torpid, he is to have an aperient draught in the morning.

23. Continues well in all respects; but the draught not having operated, he is to take a dose of castor oil.

Evening: The bowels have acted; the evacuation copious and healthy, sufficiently colored with bile, showing that the natural function of the liver is restored.

In concluding this case, it should be remarked that the Monday, Tuesday, and Wednesday, the days after which the patient was first indisposed previous to my seeing him on the evening of the last day, were remarkable for the low temperature of the air; this sudden accession of cold, coming so soon after the previous hot weather, constitutes precisely that concurrence of circumstances which long experience has shown to be so productive of the disease.

CASE

OF

DIABETES MELLITUS,

SUCCESSFULLY TREATED BY THE IODURET OF IRON.

— Blanchard, a man, forty years of age, of good constitution, was admitted into the Hôtel-Dieu, laboring under diabetes. About three months previous to his admission the patient first experienced some derangement of the digestive organs, for which he could assign no apparent cause; his appetite declined, and he felt some sense of weight and constriction about the epigastric region; at the same time he was seized with unquenchable thirst, and soon afterwards perceived that the quantity of urine passed during the day was greatly augmented.

These symptoms having continued for about a fortnight, the patient consulted a medical man, who pronounced him to be affected with diabetes mellitus, and advised him to see M. Recamier, at the Hôtel-Dieu. The latter recommended him to go into the country, to confine himself strictly to animal diet, and drink freely of some good wine. He did so, but without any benefit; on the contrary, his strength rapidly gave way, and the symptoms of diabetes gradually increased.

Under these circumstances he returned to Paris, and entered the Hôtel-Dieu about three weeks ago, under the care of M. Combette. At that time he passed fifteen quarts of urine daily; it was analysed by M. Bouchardat, and found to contain a very considerable proportion of saccharine matter. The treatment consisted in restricting him to animal diet, the administration of a bottle of claret daily, with a flask of Bagnols wine, broth without bread, and lemonade, &c., for drink; he also took four pills, each containing five grains of the ioduret of iron, in the twenty-four hours. Under this mode of treatment the quantity of urine discharged soon diminished; after the third day the man passed only twelve quarts; during the subsequent days the quantity underwent a still greater diminution, and the thirst, together with the other symptoms of diabetes, subsided; the urine discharged exceeded the quantity of fluid ingested by about a pint, and contained but a very small proportion of saccharine matter.

On the 30th of September he drank about three quarts of tizan, in addition to his wine and broth, and passed four quarts of urine. From the 30th of September to the 4th of October the treatment was continued (the number of pills being increased to five), and the improvement of the patient kept pace with it; the quantity of urine passed, at the latter date, was nearly normal, and it contained hardly a trace of sugar; the thirst had ceased; the strength was returning, and the patient was enabled to leave

the hospital on the 5th of October in good health. He was seen a few days afterwards in town, and continued well.

REMARKS.

The rapid manner in which the disease yielded in this case is well worthy of notice, especially when we reflect on the danger which usually attends diabetes, and the small number of cases of cure on record. But it may be asked, should the improvement be attributed to the ioduret of iron, to its combination with animal diet and wine, or to the latter alone? These questions are not easily answered; but it must be admitted that the ioduret of iron exercised no small share of influence in the removal of the disease, because the treatment by animal diet, tonics, wine, &c., had been previously tried for a considerable time without the slightest benefit.—*Gazette des Hopitaux*, October 20, 1842.

NOTICE OF A MAN WITH THREE TESTICLES.

The subject of the present notice, William Howard, aged about twenty years, was brought before me at this station on the 28th ult. (September), as a recruit for the 35th Regiment of Foot.

On looking at him in a state of nudity, as is usual on such occasions, my attention was at once attracted by the appearance of the scrotum, which seemed fuller and larger on the right side than on the left. A minute examination of the part was in consequence made, and the following facts, carefully ascertained, were noted down upon the spot:—

The scrotum was not at all pendulous, but drawn up and corrugated as in a healthy man, so that the difference in size and form between the two sides was very striking.

On applying the hand to the part, one testicle was found in its proper place on the left side of the raphè. In size and form and feeling, also, this testicle was perfectly natural, and may be considered, therefore, as a standard wherewith to compare the others.

On the right side of the raphè, and on the same level as the former, another testicle was found, in all respects perfectly natural, and similar to that on the left side; and of which, therefore, it may be considered as the proper counterpart.

So far all was perfectly regular; but on this side of the scrotum also (the right), another body was now felt, so similar to the other two just noticed, in size, in form, in feeling, and in consistence, as to leave no doubt of its being a third testicle.

This body was situated within the scrotum, between the groin and the proper testicle of this side, with which, however, it did not seem to be in immediate contact, but to be suspended, as it were, by a shorter cord, or hung up in a separate sac; in fact, it seemed as if it had dropped from the abdomen after the other, but had not been permitted to fall so low in the scrotum as to touch it. In consequence of this arrangement the lower testicle was not at all pressed upon by the upper.

On the left side the spermatic cord was perfectly natural in all respects, and was easily traced from the groin to the testicle to which it belonged.

On the right side, however, the cord was much

thicker than natural at its upper part, where, in fact, it consisted of two cords, one of which was distinctly traced into the upper testicle on this side, and the other, much longer, into the lower testicle. And it is to be particularly noted that in each of those parts, as well as in the cord on the left side, the vas deferens could be distinctly felt, like a piece of whipcord, between the fingers. The three testicles, therefore, were to all appearance perfect, and similar to each other.

The penis was well formed, and all the parts were fully developed, extremely dark, and well furnished with black hair; in fact, there was about the man every indication of vigor and efficiency so far as the parts of generation were concerned, and in all other respects he presented the appearance of a strong, active, well made man; his height was sixty-nine inches, and the circumference of his chest thirty-five. He was himself perfectly aware of the existence of the third testicle, which had occupied, he said, its present situation as long as he could remember, and had never caused him any inconvenience. I may add, there was no laxity of the inguinal ring on either side, nor any other appearance of local disease.

Anxious to verify the actual state of this man in the most satisfactory manner, I had him brought before me again on the following day, and again examined him minutely in the presence and with the assistance of Dr. Colclough, assistant surgeon 3rd Dragoon Guards, now in garrison here. At this examination every particular of the foregoing detail was investigated anew and fully confirmed, and the conviction was thus, I may say, forced upon our minds, that we had before us the singular spectacle of a man with three testicles.*

Similar cases to the preceding have, I am aware, been seen and recorded by other persons, but having no books here to refer to I cannot venture to make any remark on their peculiarities or on the comparative rarity of such occurrences; with respect to my own experience, however, I may say that I have in the course of my life professionally examined many thousands of men and never met with a similar example.

It only remains for me to add that the man was rejected as a soldier, in consequence of bearing upon his person marks of leeches and cupping; which, together with his general appearance, led to the suspicion that he was a deserter from the service; this, however, he denied, and, in the absence of more direct proof, he could not be detained.

F. MACANN, M.D., Staff Surgeon.

Recruiting Dépôt, Coventry,

October 15, 1842.

*** If we can believe the older writers, cases of the kind related by Dr. Macann are not very rare, but the only one which possesses any degree of authenticity is that related by Blasius (*Obs. Med.*, p. iv, *Obs.* 20). Some writers speak of four and even five testicles being found in the same person (*Scharff, Eph. Nat. Cur.*, Dec. iii, An. v and vi, *Obs.* 89). Buffon admits these facts, but without citing any proof; and adds that men with three testicles are reputed to be

* Adverting to the symmetrical arrangement of the body, I think it very probable that in this and other similar cases a fourth testicle may exist within the abdomen.

more vigorous than less favored individuals. We must remark, however, that few, if any, of recorded cases of supernumerary testicle have been verified by examination of the body after death, and without such proof some doubt must always remain as to the real nature of the case. If we are allowed to reason from analogy, we should say that the anomaly is much more likely to depend on division of the testicle into two parts than on the existence of a supernumerary organ. There is no example on record of a supernumerary ovary, and the cases of supernumerary kidney observed always depended on division of that organ, by the separation of one or more of its primitive lobules, and not on actual increase in number. Examples of supernumerary mammae are numerous; but this is easily explained by the fact of such being the natural disposition of parts in many animals; for it is a well-known law of anomalies, that many deviations observed in the human subject are but repetitions of the normal condition of inferior animals.—Eds.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, NOVEMBER 5, 1842.

A case was tried last week at Barnstaple which requires notice, as it involves a point of law materially affecting the interests of the medical profession. Mr. Joce, a respectable general practitioner, residing at Barnstaple, brought an action against a lieutenant in the navy, named Shapland, for medical attendance.

The defendant pleaded the statute of limitations with respect to a large portion of the debt; the remainder, £2 19s. 9d., he admitted on the record. It is unnecessary for us to notice the opening speech of Mr. Joce's counsel, as it referred to matters unconnected with the point to which we are desirous of directing attention. This point is the alleged necessity of proving the seal of the Apothecaries' Company, in cases where an action for debt is brought by a member of the company.

On the part of the plaintiff, Mr. Joce, an attempt was made to prove the seal by the evidence of several medical men, who had formerly received licenses from Apothecaries' Hall, and who testified to the similarity between the seal attached to Mr. Joce's license and their own.

Mr. Praed, the Recorder of Barnstaple, before whom the case was tried, decided that such evidence was insufficient.

"The court (said Mr. Praed) was quite clear that the seal must be proved; some person should be produced, either an officer of the Apothecaries' Company or some other person capable of speaking to it with certainty, from an actual knowledge of, and comparison with, the original seal itself; the witnesses produced proved nothing, for they never saw it; there should have been an officer of the company in court; he (the recorder) had often seen an officer produced in cases of this sort."

Mr. Joce's counsel was not prepared to bring forward any evidence of the kind required by the court, and Mr. Joce was accordingly non-suited.

The case will, we understand, be submitted to a higher tribunal; but we cannot avoid expressing our opinion that the plaintiff's attorney ought to have been prepared, either to prove the seal of the company, or, at least, the handwriting of one or more of the persons whose names were attached to the license.

The point of law upon which Mr. Joce was defeated is by no means a new one; it has been debated over and over again in courts of justice. It is agreed upon all hands that the certificate must be proved, and the only question which remains is, what is considered sufficient proof in a court of law. The Recorder of Barnstaple seems to think that it is necessary to prove the seal of the court, but herein we believe him to be in error. Several of the judges have decided that it is merely necessary to produce the original certificate granted to the plaintiff, and to give reasonable evidence of its being a genuine document. This may be done by proving the signature of one or more of the persons whose names are attached to the certificate as examiners, and showing that such persons acted as examiners at the time of signing the document.

The 6th of George IV., by which the common seal of the company was rendered sufficient proof of the authenticity of the certificate, expired in August, 1826; and the mode now to be adopted for proving the certificate must be the one which was in use before the passing of that act in July 1825.

To illustrate this mode we have merely to cite one of the numerous cases on record. Thus, in *Walmsley v. Abbot* (1 Carring. and Payn. 309, 5 George IV.), it is reported that, "a witness produced the certificate of the plaintiff's examination at Apothecaries' Hall, and proved that the signature of Mr. Simmons was of his handwriting, and that he acted as an examiner there; and that the certificate produced was the usual certificate given to persons who had passed their examinations."

The defendant's counsel having made some objection to the validity of the proof, Mr. Baron Garrow said, "That if it were proved that this was the usual form of certificate, and there were proof of the handwriting of one of the examiners, and that that person acted as an examiner, he would admit the certificate;" and this having been done, the plaintiff obtained a verdict. From what we have said, it seems clear that Mr. Joce's case broke down from want of sufficient evidence to prove the authenticity of his certificate; but the decision of the recorder on the necessity of proving the company's seal will probably be reversed by the higher tribunal before which Mr. Joce is determined to bring it. Such appeal, however, must be attended with very considerable expense, and unless some

change be made in the laws which regulate the affairs of the profession, we must be content to remain, as heretofore, completely at the mercy of any ungrateful and unprincipled patient who may choose to set us at defiance.

A highly respectable meeting of the medical practitioners of Shrewsbury was held at the Lion Hotel, Shrewsbury, on the 25th ult. The object of the meeting was to consider the propriety of adopting some resolution relative to the payment of fees by life assurance companies. Mr. Cartwright, who is a warm advocate of the principle that the medical referee should in all cases be paid by the office, and not by the person seeking to insure his life, supported his views in a long and able speech. We regret that we cannot, from want of space, give a full report of Mr. Cartwright's discourse, and of the proceedings at the meeting, but we shall endeavour to supply the omission next week. The following passage, however, will serve to give an idea of the feeling which prevails upon this much disputed question amongst the profession at Shrewsbury:—

“Mr. Cartwright thought it was unnecessary for him to make any further remarks, or to call their attention to the false and degraded position in which they were placed. The conduct of the offices was most unjust, mean, and tyrannical; they, by their own rule, imperatively demanded possession of the medical attendant's certificate, for which payment was most unjustly refused; they attempted to obtain possession of that document through the fears of the medical men, lest they should inconvenience, offend, and perhaps lose, “their patient—their friend,” as the companies most meanly and tyrannically presumed to call the applicant. The medical attendants could not divest themselves of the feeling, that they furnish such certificate for the information and protection of the offices against assuring an objectionable life, and, therefore, they should look to that quarter for their remuneration; moreover, the certificate became the property of the offices, and, if occasion offered, was used by them as the most powerful instrument for cancelling the policy.”

At the conclusion of his speech, Mr. Cartwright proposed that, in accordance with the expressed opinion of the Southern District Branch of the Provincial Association and of many honorable and independent practitioners throughout the country, “We pledge ourselves not to answer the inquiries of insurance offices, unless accompanied by a fee of one guinea.”

This resolution was unanimously adopted, and immediately signed by twenty of the most respectable practitioners resident in Shrewsbury. Mr. Cartwright was likewise authorised by the meeting to send a circular to the county practitioners, soliciting their assent to the resolution.

Having already expressed our own opinion on the subject of assurance office fees, we shall not recur to it

on the present occasion. The views of the medical practitioners of Shrewsbury, although directly opposed to our own, may be correct, and as we know the men who have thus openly expressed their sentiments to be above reproach, we cannot but applaud the spirit with which they have combined to support what they believe to be their just and undoubted right.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

A few weeks ago, the three surgeons attached to this hospital resigned office, in consequence of ill health or retirement from practice. Since then an active contest has been going on between six candidates for the vacant offices, which terminated on the 31st ult., in the election of Messrs. Lestourgeon, Hammond, and Humphry. The following was the state of the poll at its close:—For Mr. Lestourgeon, 280; Mr. Hammond, 266; Mr. Humphry, 221; Mr. Sudbury, 103; Mr. Thurnall, 85; and Mr. Knoweles, 20.

Messrs. Lestourgeon and Hammond are men of experience and considerable professional standing in the town of Cambridge; Mr. Humphry was, we believe, comparatively a stranger, but the circumstances of his election are highly creditable to him; he was a distinguished pupil of St Bartholomew's School, and obtained the gold medal on his examination for the bachelor's degree in medicine at the University of London. The announcement of the vacancies at Addenbrooke's Hospital induced him to proceed to Cambridge, where he was honorably elected in consequence of the character obtained by his successful studies. It is seldom that we have to record an example of this kind, and we seize the opportunity with pleasure.

ACADEMY OF SCIENCES, PARIS.

October 24, 1842.

PRODUCTION OF FAT.

M. Dumas, in his own name and that of M. Payen, mentioned briefly the results of some experiments which led them to think that animals derive their fat from plants or from the nutriment on which they are fed. M. Liebig, who has adopted a contrary opinion, thus expresses himself in a work lately published:—“A lean goose weighing four pounds will gain five pounds in weight within thirty-six days, during which it consumes twenty-four pounds of maize; at the expiration of this time the animal yields three pounds and a half of fat. It is evident that the fat is not derived from the nutriment, for maize contains only 1-1000th part of fatty matter.” The authority of M. Liebig is so great, that M. Payen and myself have for a long time sought after the fattening principle of maize, for agriculturists know from experience that a bushel of maize, weighing about twenty to twenty-two pounds, will furnish two pounds of fatty matter. The experiments which we have made prove, contrary to the opinion of M. Liebig, that maize contains 9 per

cent. of a yellow oil, about five ounces of which I lay before the Academy. Hence, in eating twenty-four pounds of maize, a goose takes in two pounds and a half of fatty matter, and we need not be astonished at the animals furnishing three pounds and a half, counting the fat which it had originally.

Hay contains 2 per cent. of fatty matter, and our experiments prove that cattle, while being fattened, and milch cows always contain less fat than the elements which they have consumed. With respect to the latter, however, the butter represents very nearly the proportion of fatty principle contained in the food of the cow, at least for the two substances just mentioned.

GALVANIC AND NERVOUS INFLUENCES.

M. Dumas communicated the following curious experiment of M. Matteucci, which had been repeated several times with success in presence of himself and M. Fleurens. Two frogs were prepared; from one the skin was removed; in the other there was merely left a single leg with a long nervous filament attached to it; the filament was then placed across the thigh of the first frog, and, on passing a galvanic current through the latter, so as to make its muscles contract, the leg of the second frog also contracted. When a plate of gold was interposed between the thigh of the one frog and the nervous filament of the other, the communication of electric influence between the two animals was interrupted, and no contraction took place; but a leaf of paper did not produce the same effect. The phenomenon now mentioned occurred in pigeons also.

ACADEMY OF MEDICINE.

October 25, 1842.

TREATMENT OF RHEUMATISM.

M. Briquet addressed a letter to the Academy, in which he announced that the sulphate of quinine in large doses is as efficacious in arresting the attacks of acute rheumatism as intermittent fever.

M. Martin-Solon remarked, that a very great variety of remedies had been employed in cases of rheumatism. Tartar emetic, in large doses, had been highly praised, but he preferred the nitrate of potass, which might be given in the dose of thirty-two scruples, during the day, without any inconvenience. The patients treated in this way experienced neither vomiting, nor copious sweating, nor diarrhoea, and in five, or at most eight days, the disease was subdued. He made these assertions on the experience of more than twenty cases treated with nitre.

THE HOUSE-SURGEON'S ACCOUNT

OF

MR. LISTON'S CASE OF ANEURYSM.

[We extract, without comment, Dr. Bucknill's letter from the last number of the "Medical Gazette."]

To the Editor of the Medical Gazette.

SIR,—Under the conviction that, by withholding from the public the whole truth of the following much controverted case, I should incur the imputation of moral cowardice, I venture to claim a small space in your just and temperate pages. A false precedent with a great name attached to it is as likely to be per-

nicious in medical as in legal science; and he who conceals the truth from motives of interest or fear is only less guilty than he who assiduously promulgates falsehood to screen himself from merited blame.

As house-surgeon to University College Hospital, under Mr. Liston, on the 20th October, 1841, I examined a boy who had presented himself a few minutes before that gentleman's visit. His mother attended with him, and gave, partly at that time, partly afterwards, the following short history of the case, which I copy verbatim from the hospital case-book as it was drawn up by the dresser for the week, Mr. Colchester:—

"George Anthony, aged twelve, admitted October 20th; has been a healthy child until, six years ago, he had measles and whooping-cough, which left him in a very reduced state. About two months ago he had a violent cough and much fever; at this time a small swelling was first observed just below the ear; it was soft, and might be easily and entirely dispersed by pressure. This was shown to the surgeon of the parish, who attended him, but as he gave no directions with regard to it, his mother applied fomentations and poultices. It has increased gradually and slowly until the last three or four days, when its progress was more rapid and irregular," &c. I examined it in the presence of some students, and expressed my belief that it was an aneurism. When Mr. Liston came at two, p.m., as the case was important I told him immediately "that there was a boy among the out-patients with a swelling in his neck, which seemed to me like an aneurism." Mr. Liston quickly came to the patient, and observed, "You don't get aneurism in boys like that." It was my duty to carry instruments. Mr. Liston asked for "something to make a puncture with." I offered an exploring needle; he said "he did not want a thing like that." I then offered a small tendon needle; he seemed angry, and produced from his own pocket several bistouries, from which he selected a full-sized one, and made with it an incision into the swelling in a perpendicular direction. Arterial blood spirted out by the sides of the bistoury. Mr. Liston observed it was "an anomalous tumor," and changing the position of his knife, held it horizontally, so that the sides of the incision were kept separate; the blood now came out in a thick gush; fainting quickly ensued, and the boy remained in an almost pulseless state for three hours. Mr. Liston closed the incision by means of three hare-lip pins and the twisted suture. There was not the slightest appearance of pus in the blood. The incision was not a small one, or made with a narrow bistoury; otherwise, why should three hare-lip pins and the twisted suture be necessary to close it? After the lamentable nature of the mistake became apparent, a student asked if a bruit had not been heard. I answered, "yes;" and Mr. Liston, after I had done all in my power to prevent the misfortune, attempted to attach blame to me for not having mentioned this symptom before. The reasons why I did not do so were—firstly, because, as a diagnostic symptom of aneurism, I believed it to be worthless; any unequal pressure exerted upon a healthy artery, as by a tumor, or by the stethoscope itself, will produce a bruit. And, secondly, because Mr. Liston permitted me to say but little on the subject. At my request alone he went to the window

to examine the swelling between the fauces, where I told him I doubted if a thrill were not perceptible. He turned away abruptly, and insisted on making the incision in the manner above stated. Surely, in my anxiety to prevent a mistake, I overstepped the bounds of my duty in saying what I did. It could not be my duty to instruct Mr. Liston in the nature of his cases. But to return. The incision was made at two, p.m.; reaction did not occur until five, p.m.; and from that time until four the next morning the swelling increased very much, becoming hard, tense, and blueish, and extending downwards to the clavicle, and inwards to such a degree as to produce great danger of suffocation by pressure on the trachea and larynx; the diffusion of the aneurism also threw great stress upon the pins. I sat up with the patient all night, little expecting he would survive until morning; the danger of suffocation, or of hæmorrhage from the giving way of the sutures, seemed so imminent. From four, a.m., until two, p.m., on the 21st, when the carotid was tied, the symptoms were less urgent. To quote from Mr. Liston's account of the operation, given in his pamphlet, "The great difficulty arose from the necessary smallness of the incision; the tumor extended downwards so low in the neck that it was impossible to extend the incision upwards, and the artery, which appeared to be at a very great depth from the surface, was to be sought for at the bottom of a small hole." The poor patient died of hæmorrhage from the wound of the operation at five, p.m., November 5. At the *post-mortem*, "the ligature was found to have been placed close to the origin of the carotid from the innominate;" "the proximal end of the vessel was quite open;" "there had been no attempt at the formation of a clot."

Much of the above detail may be thought tedious, but where different statements have been made it is necessary to be explicit. Mr. Liston has lately published this case in a pamphlet, entitled "On a Variety of False Aneurism," in which he attempts to prove that it was originally an abscess, and adduces several other cases in support of this explanation; but it is remarkable that none of the latter are in any degree similar to it. Two of them—namely, the third and the last, are plainly referable to diffuse inflammation of the cellular tissue, producing lesion of the arterial tunics; and the others to ulceration into an artery from the cyst of an abscess after the evacuation of the latter. Where is the proof that the aneurism in G. Anthony's case was ever an abscess? The swelling at first disappeared under pressure. Mr. Liston supposes that the pus which once filled the cavity was washed into the circulation by the current of blood. Now although pus is frequently without danger taken up by the absorbents, in which operation it probably undergoes a great change, when was so much as half an ounce or an ounce of that fluid ever known to be admitted immediately and at once into the circulation without fearful constitutional irritation, purulent deposits, and generally death? Yet no constitutional symptoms followed the appearance of the swelling in this case. Whether it was a true or false aneurism, according to Hodgson, or Scarpa, or others, *it was a cavity communicating with an artery and containing arterial blood*. Before it was opened it did not externally seem so large as a hen's egg, and was situated quite

high up in the neck, as is proved by its progressing so much between the fauces; and if the carotid had been tied immediately after the unfortunate incision the boy's life might have been saved. There is plenty of daylight after two o'clock at this time of the year; and if it were otherwise, an operation so urgently demanded ought to have been performed by artificial light. The circumscribed was converted into the diffused aneurism at two, p.m., but not until five, p.m., did reaction occur, and the swelling increase by blood being injected into the cellular tissue around; and after a delay of twenty-four hours the increase was so great that no chance of success was afforded to the operation. I know a case in which a popliteal aneurism was punctured by mistake, but the eminent surgeon who made it tied the femoral artery without delay, and thus did his best to remedy the blunder, without attempting to prove that the aneurism was a false one.

It is very unfortunate that Mr. Liston did not inform himself more correctly of the age of the patient, as he thinks the question of age so important in determining the nature of the swelling. The mother of the boy on two occasions stated to me that his age was *twelve years*, and I wrote that age on the card at the head of his bed. The card remains to prove it. The mother must have made the same statement to Mr. Colchester, as the hospital case-book testifies, and every student in attendance must have known the same fact.

I have been more nearly concerned in this unfortunate case than any other person, except Mr. Liston, no hostile feeling towards whom has prompted this publication of a simple truth. If any other public officer had pursued the same line of conduct, I should have thought the same plain duty alone remained to

Your obedient servant,

JOHN CHARLES BUCKNILL, M.B., M.R.C.S.

Late House-surgeon to the University

College Hospital, &c.

8, Westbourne-place, Eaton-square.

MR. LISTON AND THE MEDICO-CHIRURGICAL SOCIETY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Mr. Liston's paper having excited some talk, especially from the trickery about its distribution, I think it may not be unacceptable to mention some circumstances which have come to my knowledge respecting the proceedings of the council of the Royal Medical and Chirurgical Society with reference to that paper. It was read in the usual course, and it was referred to two distinguished surgeons to report on the propriety of publishing it in the Society's Transactions. One of the reporters, the elder, and it may be said the most distinguished, recommended that it should not be published; the other gave a very hesitating opinion in favor of publication. Those reports were read to a council of thirteen members, two of whom were eminent surgeons, not reporters. A discussion ensued, a ballot was taken, and we believe two balls only were found among the ayes. The reasons for declining to publish were, not that the paper was wanting in interest, but

that a strong impression existed that it was not what it was then stated to be—a case of abscess which had communicated with a blood-vessel, but that it was a case of aneurism occurring at the ordinary situation, and that a knife had been plunged into it by mistake, under an idea that it was abscess. If the motives mentioned were those which influenced the council, who will not say they were clearly right in refusing to let a statement which they considered incorrect go forth with their sanction?

After the council's decision on the question was conveyed in the usual course, an active canvass was commenced to overturn it, and to force the publication of the paper in the Transactions, on the ground that Mr. Liston had been made the victim of party feeling. Certainly the party was strong, eleven out of thirteen. Is Mr. Liston so unfortunate that, upon looking over the list of council, he could select eleven men who were prepared to avail themselves of any opportunity of doing him a wrong? It is not only that rival surgeons, but rival physicians, are banded against him, for there were only four, or at most five, surgeons present. The second attempt failed most signally; we are informed that only a single ball was found on the side of reconsidering the question. Such, so far as I can learn, is a simple, unvarnished statement of the proceeding of the council of the Royal Medical and Chirurgical Society on this paper. If it be true, is there any one who can fairly find fault with it, even though it has excluded Mr. Liston's paper from their last volume? I once served on that council myself, and I can conscientiously say that I never knew a set of men more desirous of doing what was right. I am not called upon to consider the justificatory matter appended to the published paper, or I might say that there is no single case there mentioned which bears any analogy with that which is the subject of the paper. Can Mr. Liston mention a single case where a common abscess, before it was opened, had made its way into an artery? The present case, too, was a scrofulous one, which is less likely than any other to do so. Everybody knows that an abscess which has been emptied, and become an ill-conditioned ulcer, may make a way into an artery; but who has seen arterial hæmorrhage come on with a great gush when an opening has been made into an abscess? Mr. Liston must not suppose, because people are unwilling to enter into a controversy upon what must be looked on as a sore subject, that therefore they are convinced by the present pamphlet that their former ideas were wrong.

I remain, Gentlemen,

Your obedient servant,

A. B.

PUS-LIKE GLOBULES OF THE BLOOD.

Although the pus-like globules found in the blood of patients affected with severe inflammatory and suppurative diseases are very like the pale globules, now so well known as belonging to healthy blood, it often happens that the former globules differ manifestly from the latter.

The pus-like globules of the blood in inflammatory affections are generally rather larger, more irregular in size and form, and sometimes more opaque, than the

pale globules of healthy blood; and the globules occurring in disease are frequently clustered together very remarkably; they are sometimes of a reddish color, including from one to four blood discs, rarely five or six, in a very delicate and pale envelope. Besides, in the pus-like globules of the blood of patients laboring under inflammatory disease, the molecules composing the nucleus are mostly surrounded, and often widely separated, by a quantity of minutely granular matter, which is either generally less obvious, or even absent, in the pale globules of healthy blood. These statements are made plainer by some illustrative figures.

In a case of great swelling with purulent deposits in the leg of a man the pus-like globules, presented an average diameter of $\frac{1}{2500}$ of an inch, and were nearly as numerous as the red discs; while in the blood of a healthy man, examined at the same time for comparison, the pus-like globules were by no means so plentiful, and they almost all ranged between $\frac{1}{3500}$ and $\frac{1}{2500}$ of an inch.—*From Mr. Gulliver's Contributions to Minute Anatomy, Lond. and Edin. Phil. Mag., September, 1842.*

IODINE IN THE NITRIC ACID OF COMMERCE.

M. Lambert, the assistant to the professor of chemistry in the Ecole de la Martinière, at Lyons, has discovered the presence of iodine in some specimens of the nitric acid of commerce in the following manner: After having saturated the suspected acid with potass or soda, he adds a solution of starch to the neutral liquid, and afterwards the concentrated sulphuric acid by drops. The liquid assumes a blue or violet color when iodine is present in the acid. M. Lambert attributes the existence of iodine in the nitric acid of commerce to the use of the natural nitrate of soda, which, according to him, appears to contain iodine in a peculiar form of combination.—*Journal de Pharmacie.*

INTERMITTENT FEVERS.

According to M. Landerer, the principal pathological changes found after death in persons who have died from intermittent fevers produced by marsh miasmata, are seated in the spleen, liver, and bile; the latter especially has undergone very great changes, both as regards its color and its consistence. It has a deep brown color, and considerable density; its specific gravity varies from 1.060 to 1.086. It contains an enormous quantity of cholesterine. In some cases, on exposure to the air, even for a short time, micaceous scales will form, and will increase in quantity so rapidly, as to change the liquid into a pultaceous mass; it is then easy to remove the portion that remains liquid, and, after having passed the scales between folds of joseph paper, to ascertain that they consist solely of cholesterine.—*Repertorium für die Pharmacie.*

RETROSPECT OF THE MEDICAL SCIENCES.

KIESTEINE.

The discovery of a peculiar principle in the urine of pregnant females, by the existence of which a gravid state of the uterus could always be diagnosed, was announced by M. Nauche, in the year 1831, to the Society of Practical Medicine at Paris. It is a gelatino-albuminous product, and is separated from the other elements by rest alone. M. Nauche stated, that if the urine be exposed for a few days in a glass, the kiesteine shows itself at the surface in the form of specks and oblong filaments, which unite in a pellicle or scum, a line in thickness. A portion of this sinks to the bottom of the vessel, and forms there a whitish deposit of a milky appearance; the rest remains on the surface, adheres to the sides of the glass, and is converted into a solid membraniform substance. M. Eguisier, who followed him, describes the pellicle as whitish, opaline, and somewhat granulated; it has sufficient consistency to admit of being lifted up with some care by its edges. Dr. Golding Bird considers it to be an imperfect caseous matter, mixed with crystals of the ammoniacal phosphate of magnesia, and, pursuing an idea of Professor Burdach, of Königsburg, that the elements of the milk existing in the circulation may, during certain conditions, be eliminated, and, not finding an outlet by the mammae, be again taken up and excreted by the kidneys, he supposes such elements to enter into the constitution of the kiesteinic pellicle. His experiments were founded on the observation of about thirty cases. Eguisier is of opinion that kiesteine is an invariable attendant of pregnancy, and so well marked in its distinctive characters, as to prevent its being readily confounded with others. Becquerel, however, could not discover it in the urine of three pregnant women which he analysed.

As these writers made their observations on not more than sixty cases altogether, Dr. Kane, while one of the resident physicians at the Philadelphia Hospital, availed himself of the opportunities afforded him by his position, to institute a series of experiments on the subject, the number of patients in the wards making it easy to classify and group the cases. His mode of conducting the experiments was as follows:—The recent urine was placed in open glass cylinders, of diameters varying from an inch and a half to that of a common tumbler, and protected from dust by paper covers. These were arranged in a dry, well-ventilated room, where the temperature was uniform and moderate, and were exposed in groups to the equal action of air and light. One set of observations were made in the twenty-four hours, and the notes taken upon the spot. The constitution, habits, and circumstances of each patient were carefully remarked, and if any experiment proved unsatisfactory or inconclusive, it was forthwith repeated. The time at which the pellicle begins to form varies considerably; it has shown itself as early as thirty-six hours after the urine had been passed, and occasionally not until the eighth day afterwards. It is sometimes preceded by the formation of shining, acicular, crystalline specks, or by the cloud-like appearance on the surface spoken of by Nauche. It

forms gradually, either at once uniformly over the surface, or in irregular striated lines, rings, trapeziums, &c., which are gradually obscured by the full development of the pellicle. About the fifth day it presents a continuous scum of an opaline, white, or creamy appearance, with a slight tinge of yellow, broken by granulated spots of a clearer white, giving it a dotted or roughened aspect. The pellicle, left undisturbed, breaks up partially, portions sinking to the bottom of the fluid, and increasing the deposit, its complete disintegration being prevented by the decomposition of the urine. The cheesy odor, mentioned by Dr. Bird as a valuable means of diagnosis, was found in only seven cases.

Out of eighty-five cases of pregnant women, whose urine was examined by Dr. Kane, sixty-eight gave a well-marked pellicle of the kind called kiesteinic; eleven gave the pellicle under a modified form, but with appearances by which it could be clearly recognised; and six gave no pellicle whatever. Of these last, one was laboring under mammary abscess, and convalescing from typhoid fever, and another was in a condition of extreme anæmia from repeated uterine hæmorrhage; the others were absolute exceptions, unless they practised repeated deceptions. All these cases were observed at the hospital.

The pellicle that is not unfrequently seen on the urine in the last stages of phthisis, in arthritic diseases, and in cases of metastatic abscess, vesical catarrh, and uterine tumors, has points of resemblance to the kiesteine, which might readily mislead the unpractised. The kiesteinic pellicle differs from those produced under other circumstances more in the manner of its formation and departure than in the appearance it presents. It commences generally within a day or two after the discharge of the fluid, and advances gradually to its development; while the other pellicles require a longer time ere they appear, and are then formed with great rapidity, a few hours being sometimes sufficient; the signs of the breaking up of the kiesteine are rarely simulated. The pellicle in phthisis pulmonalis is more unequally and irregularly disposed than that in the urine of the pregnant woman, and is consequently distinguishable by the naked eye.

The formation of the kiesteine appears to be independent of the presence of pus or mucus, the pellicle having been seen in urine which had been withdrawn through the catheter, in urine which had been filtered, and also in urine which, when treated with acetic acid, did not present any coagulation, and which did not undergo any change when treated hot with alcohol.

Dr. Kane, having thus satisfactorily ascertained that the urine of healthy females, during utero-gestation, undergoes a change indicated by the formation of a pellicle on its surface, similar to that described by Nauche, turned his attention to ascertain, by observation, whether the change occurred under other conditions, and principally during the various conditions of lactation, from the well-known fact that the elements of the milk have been found in the urine—the opinion of some physiologists that, separated from the blood, and existing in the mammae, the milk may,

during gestation, be re-absorbed and excreted by the kidneys—and finally, the supposition of Dr. Golding Bird, that the kiesteine was owing to its presence.

Ninety-four cases were examined, of which forty-two gave the usual urinary changes, without any indications of the kiesteine; eight presented a scum, but modified or imperfectly formed, and forty-four exhibited the perfect kiesteinic pellicle, as well developed as in ordinary cases of pregnancy.

Dr. Kane states the following as the conditions which appeared to exert an influence over its formation or absence:—Immediately after delivery, and during the lochial discharge, when the urine, owing to its intermixture, was more or less reddened, a scum formed of a semi-transparent, horn-like appearance, marked by arborescent figures of a sanguineous tinge. In the interval between the birth of the child and the free establishment and exit of the lacteal secretion, of twenty-three cases in which the lochial admixture was prevented, fifteen gave the kiesteinic pellicle. After the more immediate sequelæ of pregnancy and delivery had disappeared, when the secretion of milk was perfectly established, and the mother had begun to suckle freely, it appeared in two cases only. When the pellicle showed itself during lactation, unattended with lacteal disturbance, the breasts were full, and even turgid, indicating an exuberant supply or inadequate withdrawal of the secretion. Of eleven cases where there existed a mechanical obstruction to the flow of milk, seven presented the kiesteine, while it was found in only three out of eight where the secretion was interrupted, or partially suspended by constitutional disturbance. Eight out of ten healthy women exhibited it well defined at the period of weaning; but when the secretion of milk was re-established and the fluid drawn off by the cupping-glass or mouth, the kiesteine disappeared, to return when the glasses were no longer used.

These results, while they demonstrate that kiesteine is not peculiar to utero-gestation, indicate also its unquestionable connection with the lacteal secretion.

The following general conclusions Dr. Kane considers himself entitled to draw from the observations he has made:—1, That the kiesteine is not peculiar to pregnancy, but may occur whenever the lacteal elements are secreted without a free discharge at the mammæ; 2, that though sometimes obscurely developed, and occasionally simulated by other pellicles, it is generally distinguishable from all others; 3, that where pregnancy is possible, the exhibition of a clearly defined kiesteinic pellicle is one of the least equivocal proofs of that condition; and, 4, that when this pellicle is not found in the more advanced stages of supposed pregnancy, the probabilities, if the female be otherwise healthy, are as twenty to one that the prognosis is incorrect.

Dr. Kane has been unable to determine the nature of kiesteine by the aid of chemistry; he could not detect in it a notable quantity of either caseum or albumen. The urine was faintly acid up to the period of disintegration, when it underwent the ammoniacal development, and became markedly alkaline. The pellicle, examined in a microscope, possessing a magnifying power of 100 diameters, exhibited a well-defined series of flakes of a darkish yellow color, made up apparently of minute granules, closely re-

sembling, but rather more flattened than, the granules of the colostrum.—*Amer. Journ. Med. Sci.*, July, 1842.

IDIOPATHIC GANGRENE.

Dr. Hutchinson, physician to the general hospital near Nottingham, entertains the opinion that idiopathic gangrene is caused in the majority of cases by arteritis. In support of this view he has published a communication in the "*Lancet*," illustrated by cases from his own practice and by one attended by Dupuytren, and recorded in the article Gangrene, in the "*Dictionnaire de Medecine*." By idiopathic gangrene Dr. Hutchinson would indicate the disease known by the name of senile or dry gangrene, terms which he considers decidedly incorrect, inasmuch as, although most frequently observed in the aged, it is not exclusively confined to them, and the corrugation and dryness of the soft parts constitutes only a stage of the disease, and not its essential or pathological characteristic. He further distinguishes it from gangrene arising from mechanical injury, from the exhibition of certain poisons, from dropsies, cold, or destructive general inflammation.

The case treated by the late Baron Dupuytren is one of senile or idiopathic gangrene, affecting the toes of the left foot, preceded and attended with sharp and prolonged pains, which nothing alleviated. Disappointed at not receiving any advantage from tonics, anodynes, antispasmodics, antiseptics, &c., the gangrene still spreading, Dupuytren had recourse to venesection, which was warranted by the condition of the pulse, which was full and hard, and by the state of the face, which was red and animated. The patient lost eight ounces of blood, and, deriving benefit therefrom, the operation was repeated in a fortnight, with the effect of arresting the progress of the gangrene, and causing separation of the mortified parts, and consequent cicatrization.

The obstruction to the circulation in the main artery of a limb thus affected, whether caused by fibrinous or ossific deposit, Dr. Hutchinson regards as the result of inflammatory action. The treatment recommended is of course the antiphlogistic, attention being paid to the symptoms, age, constitution, &c., of the patient. In cases where discoloration of the point of an extremity has commenced, surrounded by considerable inflammation, and accompanied in a young or middle-aged patient with the characters of tolerable strength of pulse, considerable fulness of habit, or other symptoms of a sthenic character, no doubt as to the propriety of abstracting blood generally can exist. But when, in an old or enfeebled constitution, the mortification is spreading from toe to toe, and there is reason to believe that the vessels are closed either by ossific deposit or by fibrin, so that no hope can be entertained of recovering the vitality of the parts affected, it would be as absurd to bleed as it would in the same individual sinking under the effects of extensive bronchitis.

In these extreme cases little difference of opinion can exist; but when we meet with a case where the principal symptoms present are those of great pain, or, as very rarely happens, its perfect absence, where the pulse is soft, yet irritable, the tongue furred, the appetite bad, or none, where the local mischief is slowly but surely progressing, and the appearances of increased general action are wanting, then there

might be a doubt as to the treatment to be adopted. In such a case, as it may be expected that the arteries are not entirely obstructed by fibrinous deposit, Dr. Hufchinson would recommend the abstraction of a moderate quantity of blood from a vein, or the application of leeches near the part affected, but not immediately on it. One or other mode of bleeding, he says, should always be tried, unless some very cogent contra-indicating symptoms exist; nor does he object to the combination of such bleeding with a nutritious diet, or the administration of medicinal stimulants, such as carbonate of ammonia, &c., if required. His views are supported by the narration of four cases of the disease.

INJURIOUS EFFECTS OF THE ACID NITRATE OF MERCURY.

An officier de santé, practising near Paris, was consulted by a mother and daughter, who complained of an excessive itching over the whole body. He ordered them to use an antipsoric liquid, which was prepared and sold by a chemist of the place, of which they were to rub in three table-spoonfuls previously diluted with three of warm water, night and morning. Neglecting to add the water, the patients were affected soon after using the lotion with burning heat, pain in the mouth on swallowing, inflammation of the gums, discoloration of the teeth, fetid breath, and decided salivation. After a while the epidermis peeled away in large pieces from those parts where the lotion had been used. The mercurial symptoms lasted eight days. Under these circumstances a complaint was preferred before the juge d'instruction against the officier de santé, and Ollivier of Angers was directed to make a report upon the subject. He ascertained by chemical analysis, that the liquid held in solution a mixture of the proto and deuto-nitrate of mercury, in the proportion of 26 grains of the solid salt to 100 scruples of the liquid, a proportion much below the ordinary quantity usually prescribed. Ollivier, taking into consideration that the antipsoric lotion was frequently ordered by physicians without any injurious results following, that proper directions had been given both by the prescriber and the druggist, which had not been attended to, and that the strength of the caustic lotion was less than that in ordinary use, reported that no blame whatever attached to the officier de santé, nor to the druggist. Further proceedings were consequently stayed.—*Annales d'Hygiène Publique*, July, 1842.

THE DISEASES OF NIGHTMEN.

A communication from MM. Brichteau, Chevallier, and Furnari, has been published on the diseases to which nightmen are liable, from which it appears that this mode of gaining a subsistence, although dirty and disgusting, is less unhealthy than many others that may easily be named; the workmen continue to practise it to a great age (from 20 to 65 or 70); that it is probably curative or preservative from certain diseases of the skin; and, lastly, nightmen are less exposed than many other workmen to attacks of epidemic diseases. The statements thus made are drawn from direct observation, from the replies of the masters, and other sources. The men themselves are generally healthy, strong, and vigorous, and their children, equally healthy, do not manifest any repugnance to their parents' employment.

The two chief complaints to which these men are subject, arising from the nature of their occupation, are—a peculiar ophthalmia resulting from the direct influence of the deleterious gases disengaged in cesspools on the eye, the effects of which are never permanent, and the asphyxia produced by the inhalation of the same gases. To this latter affection nightmen are less subject than the masons who are engaged a few days after the emptying of the cesspool to repair the brickwork; no cases of the kind would occur if proper care were taken to ventilate the cesspool, and to clear out the gases previous to the men going down into it. That it can easily be avoided is proved by the fact, that a master nightman who employs annually from eight to twelve nightmen and masons, has not had a case of asphyxia among them for twenty years, and another who has from eight to ten men daily at work, has had only one case, which was cured in ten hours; and a third master, employing fifteen men, including carters, had also never had a case. The most dangerous periods are at the commencement and termination of the work, and some few days after the cesspool has been emptied; the exhalations are more active, and accidents more frequent in summer and autumn than in winter or spring.—*Ibid.*

HYDATIDS.

A man, fifty-nine years of age, was admitted into the Westminster Hospital, under the care of Mr. White, for retention of urine. The fourth day afterwards, the surgeon opened the bladder from the perineum, when about a pint of urine escaped, but the distension above the pubes was not diminished, nor was the pain lessened. The man died the next day.

On examination of the body after death, the abdomen externally presented much the appearance of a woman far advanced in pregnancy. On opening the cavity, the bladder was found to be greatly distended, and above it a tumor, having the appearance of a second bladder; it was firmly attached to the upper part of the vesica, and less so to the omentum. On dissecting it out, it was found to be a sac, containing at least three pints, filled with hydatids, some the size of marbles, others as large as pullets' eggs; this had so pressed the bladder against the pubes as to divide it into two portions, one above the bone, and rather overlapping it, and the other below, so that when the bladder was punctured, only that urine escaped which was in the lower part of it; the portion of the bladder above the pubes contained more than two pints. The viscus itself was healthy, excepting a small spot of ulceration on the posterior part. The prostate gland was but little enlarged.—*Medical Gazette*, October, 1842.

NASAL POLYPUS.

An anonymous writer, in the "*Bulletin Général de Thérapeutique*," recommends the following measures to be adopted after the extraction of the mucous polypus of the nasal fossæ by the forceps, to prevent a return of the disease:—If there exist pain and heat in the nasal fossæ, with a feeling of weight and constriction in the fronto-orbital regions, emollient applications and marsh-mallow injections are advisable, and if the phlogosis be more severe, leeches may be applied behind the ears. When the inflammatory symptoms have been subdued, the astringent injections, such as a concentrated solution of $\frac{1}{2}$ alum, may

be had recourse to, but the writer looks upon a solution of nitrate of silver as most proper to prevent a relapse. He mentions two cases of mucous polypus which he extracted, where he afterwards touched the upper and lateral parts of the nasal fossæ with a nitrate of silver solution seven or eight times, and in these no relapse has taken place. One was operated on two years ago, and the other six months since.

REGULATIONS OF THE COLLEGE OF SURGEONS.

In reply to the remarks contained in the "Medical Gazette" and "Medical Press" of this week, we publish the following extract from a letter written by Mr. Guthrie on the 15th of July, 1842, and recently published by Mr. Guthrie himself:—

"The difficulty has been removed by the kindness of the Court of Examiners, who *have* (?) and are admitting gentlemen of their standing (i. e., older members of the profession, who have no qualification to obtain that of the college), to examination *on their merits practically, without reference* to the regulations which are in force as to their education."

So, then, the Court of Examiners have been for many months back smuggling *unqualified* and, for aught any one knows, uneducated men through the college.

Mr. Guthrie seems to think it a very laudable proceeding. But we cannot condemn the college of such base deception as this would imply, without better evidence than that of the worthy ex-president, who must surely labor under some strange bewilderment.

SUPPOSED ANTIVARIOLOUS PROPERTIES OF TARTAR EMETIC PUSTULES.

M. Lichtenstein has published a curious article on this subject in "Hufland's Journal." His attention having been excited by the similarity of appearance between the small-pox and tartar emetic pustules, he was led to make some experiments on the properties of the latter. Clear lymph taken from the pustules produced by friction with the tartar emetic ointment, was introduced, in the usual manner, underneath the epidermis of persons who had not been vaccinated. It gave rise to pustules which it was impossible to distinguish from those produced by vaccine matter. The lymph of the tartar emetic pustules was inoculated from individual to individual, and invariably gave rise to pustules of the same form, and attended by the same symptoms.

Since the year 1836 the author affirms that he has practised thirty-one vaccinations and re-vaccinations with the matter from tartar emetic pustules; the persons thus vaccinated were placed in intimate relation with individuals affected with small-pox during an epidemic of that disease, and they all escaped contagion.

Many further experiments will be required before the conclusions of the author can be admitted; in the

meantime, we would take the liberty of directing the attention of Mr. Ceely to this curious and interesting subject.

MEZEREON OINTMENT.

M. Hoffmann, of Landau, gives the following formula for the preparation of this ointment:—Take alcoholic extract of Mezereon bark, 4 scruples; alcohol, 15 scruples; dissolve, and add 230 scruples of lard, and 30 scruples of white wax. Mix.

This ointment may be employed to keep up suppuration, or as a revulsive, in frictions on the skin.—*Arch. der Phar.*

SURREY COUNTY GAOL.

A vacancy in the office of surgeon to this gaol having occurred through the death of Mr. Malcolm, no less than twelve gentlemen have addressed the magistrates as candidates for the situation.

PROMOTIONS AND APPOINTMENTS.

War-office, November 1.

35th Foot—Surgeon David Lister, from the staff, to be surgeon, vice Sillery, promoted.

Hospital Staff—Surgeon Robert Sillery, M.D., from the 35th, to be staff-surgeon of 1st class, vice James Wilson, who retires on half-pay; Staff Assistant-surgeon Robert Allan, to be staff-surgeon of 2nd class, vice Lister; Alexander John Fraser, M.B., to be assistant-surgeon to forces, vice Allan.

NAVAL.

Assistant-surgeons—D. Wilson, to the Naval Hospital, Plymouth; W. Hammond, to the Resistance.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, October 28, 1842.

W. M. Dalglish, M. M. Bull, J. Rogers, J. H. Forster, H. C. Wildash, E. Moore, J. Wade, R. B. Penny, W. Dalton, J. H. Steele, R. Barnes, T. S. Lee.

APOTHECARIES' HALL.

Licentiates admitted Friday, October 14, 1842.

T. Peat, J. Moore, H. D. Scholfield, J. Rhodes, W. Boyd, C. Telfair, J. Vickerman, J. I. Acheson, J. M. Best.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

A Medical Student.—The fee is twenty guineas.

The reports from the *Birmingham* and *Sheffield* societies are unavoidably postponed until next week.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET,
CAVENDISH SQUARE, LONDON.

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COURSE OF CLINICAL LECTURES, DELIVERED AT THE MIDDLESEX HOSPITAL. BY DR. WATSON.

Lecture III.—October 29, 1842.

GENTLEMEN,—The observations I shall this day address to you will of necessity be brief, and strictly in accordance with my intention in this course of clinical lectures. Two deaths have occurred in this hospital since our last meeting here, and although those cases are not very fruitful of topics for remark, yet, in compliance with the rule I have laid down, I shall advert to them first, and afterwards, if time permit, solicit your attention to one or two other cases on the book.

Of the two cases which have terminated fatally, the first is that of a woman, named Clara Forster, aged sixty-eight. She was admitted into hospital laboring under anasarca of the legs, which extended up to the knees; there was also a swelling and constant coldness of the hands. She had been so affected for a year and a half previous to her admission. On examination, I found her abdomen rather full, her urine scanty, and her bowels confined; she suffered in some degree, also, from short breath, and, in consequence of this difficulty of respiration, she required to have her head supported on a high pillow; there was no palpitation of the heart, and on inquiry I found, as I fully anticipated, that she had never had rheumatic fever; she could lie on her left side only, in consequence of a pain in the right; there were occasional interruptions of the pulse, and she complained of vertigo, especially on stooping; of late the womb came down much, and she suffered very much from piles; the urine was acid, and not coagulated by heat. I should add that she was considerably deformed also, the spine having become much curved forwards. In treatment little could be done, further than to procure alleviation of actual suffering, and to render less burdensome the brief period of existence allotted her. She had reached, as I have mentioned, the age of nearly three score years and ten—a length of life not granted unto all, and which is, as it were, the great foredoomed limit to humanity. Hers, then, may be considered rather a common mode of corporeal decay and dilapidation of the whole frame than as a case of disease. You will continually meet with similar instances of the earthly tenement wearing away.

The case was, as I have already said, one of anasarca and though by no means uncommon in occurrence, nor peculiar in circumstances, it may be well for us to inquire what was its cause. Anasarca is a result dependent in various cases on various causes. To all the causes, or all the ascertained causes, it is not my

purpose, nor is it necessary, now to advert. I shall content myself with a brief allusion to one or two of those diseased conditions of which it is a common result, but of which neither was present in this case. In the first place, anasarca might have proceeded from a particular state of the kidneys—from that peculiar disorganisation of the organ which is known by the appellation of granular kidney, and which is also called Bright's kidney, from the circumstance of its having first been rendered an object of marked attention by Dr. Bright. In this case the anasarca did not depend on any renal disease. In the urine, when heated, we could discover no albumen, neither was there any trace, on testing with nitric acid; and hence I concluded there was no disease of the kidney. Neither did the anasarca in this individual result, as it sometimes does, from any pressure on the inferior cava. Such effects from such a cause are not infrequent in pregnant women, or in persons affected with internal tumors; but no such cause existed here, as was to be inferred from the circumstance that the hands also were involved, on which no such internal pressure on the inferior cava could have so operated. In fact, the case was one of impeded circulation through the heart and the blood-vessels in immediate connexion with it; the transmission of the blood was impeded by some of those changes incidental to her period of life. She had nearly reached the age of seventy, and at that time changes are very common in the system, and seem merely the effects of nature; the impeded blood becomes accumulated, and, being retained in the veins, causes effusion. The state of the pulse corroborated this inference. The deformity spoken of also contributed to the impediment to circulation. A consequence of this impediment, from congestion of the blood, was a shortness of breath and effusion into the bronchi; the vertigo was also to be attributed to the same cause. Two other circumstances presented in this individual instance are very common in such cases; I mean polapsus uteri and hæmorrhoids, or piles. In consequence of the defective circulation, the veins, particularly those in which the ascent of the blood is impeded, become turgid and overloaded; what women often call a bearing downwards of the uterus is often felt, and the term is not inappropriate, for it is really a bearing or falling down of the choked and oppressed veins, which seek to unburden themselves by hæmorrhoids, and those sometimes very much aggravate the patient's sufferings. In the case of this woman I tried expectorants and diuretics with no effect, that is no effect of any duration. She died on the 22nd. As her friends refused permission to have her body examined we have not been able, by actual demonstration, to verify the diagnosis, but of its correctness I can entertain no doubt. I have said such cases are very common; they are the results of thoracic decay, and

a general alteration of the system, particularly of the cardiac organs. Such parts should be relieved by taking some blood from between the shoulders by cupping, and recourse should also be had to expectorants and diuretics.

The other patient, who died since last we met here, presented a case of disease very common in this country, and, indeed, from all we can ascertain, too common in all countries—phthisis. I allude to John Abel, an old man, who had been a jockey. He had been my patient in February last, and then said he was sixty-two years old; he was certainly sixty, and probably more. In February he complained of pains and stiffness in his limbs, and was affected with rheumatism, to which, as he said, he had been a martyr for seven or eight years. Four years before he had been Dr. Hawkins' patient. At the time of his former admission to the hospital in February, I carefully ausculted his chest, which, on his last reception, I did not feel it necessary to do. He had then chest symptoms; he could not lie down with any pleasure, as he not inexpressively termed it; he had a cough, with a difficult expectoration of thick mucus; the respiration was found feeble in both lungs, with here and there creaking and crepitation. He left the hospital on the 22nd of March, being then in his usual state of health. Between that period and his return to hospital I frequently saw him in the streets. He was readmitted on the 20th of September with rheumatism, as before. But the pulmonary affection had become more developed; his respiration had become more feeble; his cough was now very troublesome; he told us, at night, he had wasted away very fast during the interval, as was perceptible at a glance; he had now a frequent pulse and diarrhœa. In short, the symptoms were all those generally attendant on phthisis. We succeeded in relieving his pains, and in making him more comfortable. But he gradually pined away; his pulse growing daily more and more feeble, his features sharpening, and his strength so reduced that he was unable to get out of bed. On this occasion I did not annoy him with much auscultation; it would have been painful to him, and was unnecessary. He died in about a month after his admission—that is, on the 22nd of October.

On the post-mortem examination, the lungs were found to be stuffed with tubercles, and here and there were hollowed out into small vomicæ. The number of crude tubercles was very great; the cavities were not very large, but they were many in number; the pleuræ were very much thickened with adhesion on both sides, particularly on the right, and this adhesion seemed of long standing; the lower part of the left lung is described as having been in the first stage of pneumonia. It was altogether a case in which the ordinary phenomena have been clearly apparent. The tubercles were numerous and advanced in the upper portion of the lungs; this is very important as to the verification of the diagnosis, wherever that is doubtful. The inflammation of the pleura has given origin to the name by which this peculiar species of disease is called, pleurisy, and the adhesion is a consequence of the tubercles; it may be considered a conservative attempt made by those organs to prevent the vomicæ breaking into them. The surface of the lung was irregular, and pneumonia apparent in the

left portion, which was probably the immediate cause of death. I shall have other and better opportunities than the present of speaking of the varieties of this dreadful and destructive disease, and of the modes of treatment to be adopted. For the present I shall only direct your attention to the age of the patient, as a circumstance worthy observation, because one of the many instances in refutation of a common error. This man was between sixty and seventy years old; certainly beyond sixty. The error to which I allude, which I cannot of course suppose to be entertained by any professional man of the present day, but which is undoubtedly very prevalent with the public, and more especially among the uneducated classes, is the belief that if a person reach beyond a certain time of life, he is then safe from any fatal consequence of this disease—that if he attain to twenty-five or thirty years of age the disposition to phthisis is outlived. The melancholy truth is contrary to this fond supposition; the treacherous disease appears and proves fatal at different stages of existence—in maturity and in old age as well as in youth. And this fact you have learned, or you will learn from your observations in this hospital, in which, although we are anxious and careful to exclude cases of consumption, in obedience to the rules and ordinances of the institution, the cases are many and frequent of phthisis in all and every period of life.

I shall now turn to one or two cases which have been more successfully treated, on which my observations must be few. One of those, which may be in some degree interesting, is the case of a younger patient than either of the last. William Smeed, aged twenty-three years, a traveller, or, as until lately persons so employed were called, a bagman, out of employment—a person probably of intemperate habits, for that class of persons are or were generally so addicted. He was admitted on the 11th of October. The conjunctivæ were yellow; the skin of his face and his chest was of a bright lemon color; he said it had been of this bright yellow hue for nine days. Some time before he had had a suppurating gland in the groin—a bubo, which was followed by this attack. After the healing of the bubo he had been attacked with nausea and vomiting; soon after the yellowness appeared, and ever since he had nausea, and felt himself unwell. He had no pain anywhere; no tenderness in the side or in the hepatic region. A piece of white paper appeared to him white, and I found that his eyes were not vascular. This I mention, because in very many instances of jaundice I have found considerable vascularity of the eyes, and a false perception of color—white objects appearing to the patient of a yellowish tinge. His urine was dark colored, and the alvine evacuations pale and clay-like. I administered on his entrance five grains of calomel, and next morning a mixture of castor oil and oil of turpentine. This set the excretory organs free, and the patient showed signs of recovering. On the 14th I put him on five grains of blue pill, to be taken morning and night, with three drachms of Epsom salts three times a day. By the 18th his gums had become slightly tender, but the day before that, the report states, the yellowness of the skin had plainly become less intense. For the last week the yellowness has completely disappeared; the stools and urine are now

quite natural, and the patient, I trust, nearly restored to permanent health.

Jaundice is in itself a very curious condition, from whatever cause it may originate, and its causes are many and various. In this disease it is uniformly found that the yellow color which should naturally appear in the alvine excrement is absent, but shows itself in the urine and in the skin. In fact, either the coloring matter of the bile, after having been secreted in the ordinary way, is taken up again into the blood, or it fails to be separated from the blood, where it accumulates. The matter so accumulated is partly expelled by way of the kidneys, part finds its way to the surface of the body, and imparts to the skin the curious unnatural hue indicative of jaundice. Mere delay of the bile in the gall-bladder is not sufficient to cause jaundice, as I showed you when noticing another case on a former day, where the gall-bladder was full to the very lips of the orifice, and yet no jaundice had ensued. When the unsecreted bile, or rather the coloring matter of the bile, becomes thus accumulated in the blood, it has, besides imparting to the skin that peculiar tinge, other and poisonous effects. It is almost always attended by great lowness of spirits, or hypochondriasis. When sudden and intense in its attack, as it sometimes is when caused by unwonted excitement, by passion or mental emotion, its effect on the brain and the nervous system is apt to be fatal. Mr. Northcote relates a case where the appearance of jaundice was instantaneous and intense in the person of a servant girl, who was charged by her mistress with being pregnant—alarm and shame with the suddenness of the discovery having powerfully operated on her. When thus sudden in its assault it frequently produces coma and death. It is less injurious and less formidable when it comes on gradually, except in cases in which it originates from some organic cause. But jaundice is itself not a disease, but only a symptom of disease; and we must inquire what is the cause of the symptom—what is the disease of which it is a result. In this case to which I have been adverting, it probably proceeded from congestion of the liver. The man was probably intemperate and imprudent in his youth, and the congestion may have proceeded from the effects of remedies necessarily used to banish other disease. When proceeding from this cause, we relieve the patient by draining the liver, by relieving the congestion; for which purpose we find neutral salts effective; they act on the intestines, on the liver and duodenum, and cause watery stools. Blue pill also relieves the bile.

Sometimes jaundice proceeds from pressure on the gall-ducts, and a blocking of them up, as I have seen in the case of a patient so affected in consequence of pressure on the head of the pancreas; sometimes perhaps it proceeds from spasms; and sometimes from deep-seated and structural alteration of the liver itself. The hues of jaundice are various, though all partaking of yellowness to some degree; and this variety may be considered as the consequence of the variety of causes. In the case of the patient Smeed, the color was a bright yellow, perhaps best designated lemon color. Sometimes the color is more ruddy, more like an orange, as in febrile jaundice, where the floridness of the fever imparts a degree of ruddiness, and the mixture of this redness with the yellowness of

the coloring matter of the bile gives the orange hue. Sometimes the color is green, and green jaundice is always a bad omen, for it either proceeds from the circulation of blood vitiated by bad and radically unhealthy bile, or it is the yellowness of jaundice combined with the livid blueness of thoracic disease.

To one other case I shall briefly advert. Having to attend a committee of the hospital, I must limit my observations to a case not requiring lengthened remark. Such is that of George Wilkinson, aged fifty, a sawyer. This man has genuine gout. It is a disease very rare among the lower classes, and seldom finds its way to an hospital, unless in the persons of butlers and other servants of wealthy families, who live luxuriously. However rare in the class to which this man belongs, there can be no doubt that his disease is gout. It began, he tells me, seven years ago—that is, when he was about the age of forty-three, when it affected his great toe with swelling, slight redness, and pain, which was most severe at night. It was for many years confined to his feet, each of which it visited alternately, until two years ago, when the joints of the upper extremities became involved. The disposition to gout is frequently derived from the parents, or progenitors, but none, that he knew of, of his family had ever been so affected. He is not of that class that are in the way of acquiring the disease, as butlers and others having access to luxurious living; he is a sawyer, a member of a trade which does not afford very indolent living. He had gone through many hardships, and had served with the army on the peninsula. He does not appear to have been intemperate, and says if he exceeded at all, it was in porter, of which, when at full work, he was in the habit of drinking about four pints daily. That quantity is not, I believe, to be considered excessive in persons of his class, when hard at work. Porter has been found, when drunk immoderately, to have a tendency to produce gout. The persons employed on the river in the heavy work of removing ballast, and who are called, I believe, ballasters, drink very large quantities of porter, and among them great numbers are affected with gout. The medical officers of the Dreadnought hospital ship state that a very large proportion of their patients are those ballasters so diseased. Gout is apparently a consequence of some poison in the blood, and from its being carried about in the circulation, we may account for the pains shifting hither and thither. It is often inherited, often acquired. It generally occurs with unnatural urine. Colchicum is found a generally successful remedy; it effects the cure by neutralising or expelling the poison from the blood. There is one point particularly worthy attention, as regards the treatment. This patient has found the greatest relief from the iodide of potassium; and his case affords the second instance that has fallen under my notice within the last month, of the certain and acknowledged good effects of that remedy. A gentleman, who has been frequently and severely visited with gout, lately assured me that he had found the iodide of potassium most efficacious. Two cases of beneficial results from its exhibition are certainly not sufficient to establish it as a remedy, but they render it worthy of particular attention. I must now, Gentlemen, close my remarks. On next Saturday I hope to be able to bring under consideration some cases of more importance.

COURSE
OF
LECTURES ON ORGANIC CHEMISTRY
AS APPLIED TO
MANUFACTURES AND AGRICULTURE.

By M. PAYEN, Member of the Institute.

LECTURE IV.

Preservation of Manure—Desiccation—Blood—Flemish Manure—Manure Cellars—Price—Comparative Results—Commerce of Manure—Importation—Exportation—Marl—Animal Black—Guano—Importation into England—Pigeon's Dung—Adulteration of Manure—Rational Use—Analysis applied to the Quantity required by the Nature of the Soil—Cultivation.

GENTLEMEN,—From what I told you in my former lecture, it appears that nitrogen is the essential basis of all manure; and hence it follows that the agriculturist should employ, for the purpose of enriching his land, such substances as contain the greatest quantity of nitrogen in the least bulk. On the other hand, while we lay due stress on the value of nitrogen, we must not forget the important influence exercised on vegetation by non-azotised organic matter and by certain inorganic substances, as silica, lime, &c. We have already seen that humus is essentially composed of carbon; when mixed with a certain proportion of animal matter, and submitted to the action of heat and moisture, this carbon decomposes slowly and gives out carbonic acid, which latter saturates a portion of the ammonia furnished by the decomposition of the azotised matter. Any excess of carbonic acid is dissolved by the water contained in the soil, or, rising into the air, is taken in by the respiratory surfaces of the plant. Some mineral substances—as lime, alumina, silica, &c.—are carried along by the sap-fluids of vegetables, and appear to be necessarily connected with the existence of a great many plants.*

We shall now turn to the preservation of manure; and this is a highly important subject, for when well understood it teaches the agriculturist how to import manure from distant countries and keep it as long as may be requisite without the danger of fermentation, which always destroys a portion of its fertilising principle.

We have already seen that we obtain an exceedingly rich manure by drying the blood which is procured in such quantities from the slaughter-houses. The same process of desiccation may be applied with advantage to the dung produced on farms; it is less simple than the process of drying blood, but the waste is very little; about 2 per cent. of the value of the

* Some vegetables have a peculiar tendency to absorb the mineral salts contained in the soil. The genus *rhubarb* shows this tendency in a very high degree; the oxalate of lime or potass, found in the roots or stems, arises from the absorption of an alkaline basis and its saturation by oxalic acid which exists, *a priori*, in the plant. Oxalic acid is very abundant in the vegetable kingdom, and this is easily understood when we remember its composition ($C^2 O^3, H O = C^2 O^2, + O h$) and with what facility and under how many circumstances it may be produced. Oxalic acid in combination with potass exists in several roots, particularly those of *rhubarb*, *tormentilla*, *gentian*, *saponaria*, &c., as an oxalate of lime it abounds in many lichens.

material is lost; but as 100 parts are reduced to 33 in drying, the expense of cartage is reduced about two-thirds. M. Dailly, a celebrated agriculturist, arranges his stable manure* in small heaps, or cocks, for the purpose of drying it. The cocks are constructed and thatched exactly like those of hay, oats, &c., to protect them from the rain; the moist and solid portions should be well mixed up with the straw, so as to give free access to the air. Besides this the agriculturist will take care to construct his heaps of manure as close as may be convenient to the ground on which it is to be spread. The expense of laying out manure, when thus dried, is much less than that of moist material. It is unnecessary to add, that dried manure is chiefly suited for argylaceous soils, and that it should be used shortly before the rainy season.

In Belgium and Flanders, where the cultivation of land is carried to a high degree of perfection, the manure (*Flemish*) is kept in subterranean cellars, removed from all atmospheric influence which might develop fermentation. The Flemish manure is composed exclusively of night-soil, to which a certain quantity of water is generally added, so as to render it fluid. The night-soil is carried in casks to the place of deposit; the casks emptied through their bung-holes, and the fluid conducted along a gutter into the hole; this latter has two openings—one to receive the gutter, the other, which usually faces the north, to give exit to the gases produced during the slow fermentation of the manure. When the hole is full, the first opening is carefully closed to prevent the access of air, which would render too active the slight degree of fermentation that takes place. When the season for manuring arrives a number of large tubs are placed round the manure holes, and the fluid is carried from them in hods, or in water-carts, exactly like those employed for watering the streets. The use of this fluid manure in irrigation produces the most wonderful effects; it is equivalent to more than three times the quantity of our stable manure, which contains 4 per 1000 of nitrogen; still they employ in Flanders two and a half times more of their rich manure than we do, but the produce amply repays the expense.

Manure now forms a very considerable branch of commerce, which has been wonderfully extended within the last few years, for the methods of desiccation and preservation now in use are comparatively of modern date. Manure is a matter of import and export; we send immense quantities of it to our colonies, and the importation from foreign countries is increasing every day. Each county is engaged in the commerce of manure according to its situation, riches, &c. Normandy and Brittany employ and export very large quantities of a peculiar substance called *merl*, a corruption of the English word *marl*. It is an animal production exactly like common sand in appearance, but containing much more nitrogen (5 per 1000) than farm manure. It is composed of carbonate and phosphate of lime and organic matter derived from the animals which have produced it. This substance is highly esteemed in Brittany.

The animal black derived from manufactories for refining sugar contains 15 per cent. of coagulated

* Dung of horses, cows, &c.

blood, and is a very valuable manure. Nantes, and the seven adjoining counties, furnish annually twenty millions of pounds of this substance. In certain parts of Peru, the soil, which is very barren, is rendered fertile by a species of manure called *guano*; this is nothing more than the excrement deposited by immense numbers of aquatic birds in some islands of the South Sea. When a small quantity of this substance is placed on a soil composed merely of white sand and potter's clay, it furnishes an abundant crop of maize. The soil thus prepared contains no other organic matter than the *guano*, which is composed of urate of ammonia, oxalate of ammonia, phosphate and carbonate of ammonia, and some earthy salts (Fourcroy, Vanquelin). It fetches a very high price in England (£2 8s. for 200 lbs); but if we can believe the reports of the English merchants, several agriculturists have found their benefit in employing it. The *guano* of Peru has been recently introduced into France under the name of *columbine*, but true *columbine* (excrement of pigeons) is even richer than *guano* in nitrogen, containing 80 to 83 per 1,000. The Flemish agriculturists esteem the true *columbine* very highly, and farm the pigeon-houses of Picardy every year for the purpose of exporting it; they employ about four pounds worth of it for every acre (French).

In proportion as the commerce of manure became a matter of importance, the various substances employed have undergone every kind of adulteration. Since the year 1824 the animal black of sugar factories has been much sought after; but now the adulteration of this substance is so general, that it is impossible to obtain it in a state of purity. Indeed, the adulteration was carried to such a pitch that the executive government was forced to interfere, and appoint persons to analyse the suspected merchandise. Little benefit, however, accrued from this measure, because the experiments were conducted in too rough a manner. A certain quantity of the substance having been weighed, was exposed to a strong heat in a platinum or earthen capsule; in this way the loss of weight was supposed to indicate the proportion of organic matter contained in the mass. But the most common adulteration—viz, the admixture of turf-dust, escaped detection by this method.

The following is the method now generally employed for the purpose of analysing different kinds of manure. The first point is to obtain a sample which represents correctly the composition of the whole mass; this is easily effected by taking about 200 pounds weight from the mass, mixing them well together, and then dividing them into ten portions, which are also carefully powdered and sifted. Then a small quantity—say ten, five, or two scruples, is taken from each. The quantity selected is then completely dried in a glass tube (one end of which is closed) plunged in oil heated to 100° or 120°; the tube communicates with another tube full of chloride of calcium, and the latter communicates, in turn, with a bell placed on the stand of a pneumatic machine. When the apparatus is thus arranged and a vacuum formed, the whole of the water contained in the sample is expelled and absorbed by the chloride of calcium; when there is no longer any trace of aqueous vapor, the solid matter is weighed, and submitted to combustion in one of Liebig's tubes, with some oxide of copper. The carbon

is thus reduced to carbonic acid by combining with the oxygen of the oxide of copper; the hydrogen unites with a portion of the same oxygen and forms water; the carbonic acid is received into a tube filled with a solution of caustic potass, which saturates the acid. The water is partly condensed in the globular portion of the tube and partly absorbed by the chloride of calcium contained in a tube fixed to the end of the former one. While this is going on, the nitrogen passes through the alkaline fluid contained in the *tube à boules*, is dried in passing through the chloride of calcium, and is received into graduated bells which indicate the exact volume of the gas. We must not forget that the sample may contain a small quantity of oxygen; to obviate this source of error, a small leaf of metallic copper is fixed in the combustion tube, and absorbs the gas as fast as it is disengaged.

The mode of analysis just described may likewise be applied to the determination of the quality of any given soil, or, in other words, of the quantity of azotised matter which it contains, for this is the measure of its fertility. In this way the condition of the soil, at the time of letting and at the period of receiving it from the tenant, might be determined in a very accurate manner.

The experiments of M. Boussingault enable us to determine precisely the quantity of azotised matter abstracted from a soil or communicated to it by any given mode of culture.

Corn, as is well known, exhausts a soil more than any other species of vegetable; but this depends not only on the action of the roots of the plant, but because every portion of it is taken away, which, if left to decay on the ground, would have restored to the earth some of the nitrogen extracted during vegetation; besides, corn is not cut until the grain is ripe, and the grain of every species of corn contains a certain proportion of azotised matter. The effects just noticed are not produced by plants, the leaves of which present an extensive surface, absorb all the nitrogen contained in the air, and economise the nutritive elements of the soil. Upon this principle we can explain the excellent results obtained by the extensive cultivation of clover, lucern, &c. Finally, the cultivation of potatoes, which generally precede a corn crop, is attended with many advantages arising from the mode in which the land is worked; while the leaves and useless weeds which remain on the ground are, in practice, considered as equivalent to a quarter part of manure.

EFFECT OF TARTAR EMETIC ON THE GENITAL ORGANS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In the anticipation that some of your numerous readers may have witnessed similar unpleasant results from the use of the *unguent. antim. potass. tart.* applied externally as a counter-irritant, I am induced to beg your insertion of the following two instances, which have fallen under my notice, in one of which the above ointment was ordered to be rubbed on the chest and in the other over

the region of the liver; in both cases the use of the ointment was followed by a copious crop of pustules all over the scrotum, and no appearance of any or the least eruption on the part where the remedy was applied. Whether this was owing to any idiosyncrasy, or to some specific effect on the genital organs analogous to the action which arsenic exerts on them, I must leave you or some of your correspondents to decide.

In May, 1838, I was consulted by J. M., aged twenty-one, the son of a butcher in this town, who was laboring under symptoms of incipient phthisis; he was ordered a pectoral mixture, and an ounce of tartar emetic ointment to be rubbed on the chest in the usual manner; after a few days elapsed I was summoned hastily to see the patient, when I found him lying in bed with the whole of the scrotum covered with a dense crop of pustules far advanced towards suppuration; I immediately charged him with having applied his hands to the part after using the ointment; but he declared he had not, and prayed urgently to be relieved of the pain, which he described as burning and intolerable; this was successfully combated by cold saturnine lotions, anodyne fomentations, and emollient poultices, &c.

Soon after the above, occurred the following case:—Mr. J. D., aged thirty-nine, a respectable farmer in the neighbourhood, called on me, suffering from pain, tenderness, and slight enlargement of the left lobe of the liver; he was, in addition to other treatment, requested to rub in every four or six hours a teaspoonful of an embrocation containing one drachm of emetic tartar; on the third day I was requested to visit him, and found him precisely in the same state as before-mentioned, with the exception that, being a married man, he was, if possible, the more concerned about the condition of his organs of generation. I likewise charged him with having touched the part with the remains of the embrocation after each application; but he, like the first patient, protested he had immediately washed his hands each time after using the remedy. Strange to say, there was not the slightest trace of any redness or irritation in either instance on the part to which the application was directed to be applied; I therefore concluded that absorption had taken place, and some specific action exerted on or conveyed to the external covering of the scrotum, similar to what is observed in persons who have been laboring in mines containing a great proportion of arsenic, or those who have been exposed to the fumes arising from the consumption or volatilisation of arsenious acid in various trades and manufactures. I mentioned these facts to an eminent practitioner with whom I was connected at the time, and he stated he had only seen *one* instance of the kind during the whole of his long and widely extended practice, and that in this he at first suspected the ointment was accidentally and thoughtlessly applied to the part.

Pereira and Rayer are the only writers whom I have consulted who have touched on this subject. The former gentlemen, in his admirable work on *Materia Medica*, remarks, "Occasionally adventitious eruptions have appeared in other parts of the body, which have been ascribed to absorption of antimony into the system. But I believe, with Rayer, that they arise from the inadvertent application of the ointment

to these parts." But in these two cases I have sufficient reason to believe that this was not the fact. In another passage the same author remarks, "as a local irritant applied to the skin, may be employed in the form of aqueous solution, ointment, or plaster. It is used in the same cases as vesicatories, over which it has the advantage of *not* affecting the urino-genital organs." (*Elements of Mat. Medica*, part I, pp. 419—20.) I may here remark, that I have found the form of plaster more certain, safer, and less liable to be followed by such disagreeable results. Should this effect be often produced, it will prove a serious obstacle to the free use of this useful, but perhaps too common, means of producing counter-irritation, and would be particularly annoying if a similar condition should occur among the more refined of the fair sex.

I am, Gentlemen,

Your obedient servant,

WILLIAM GRIFFITH, M.R.C.S.,
Surgeon to the Oswestry Dispensary.

Church-street, Oswestry, Salop,

November 5, 1842.

TREATMENT OF UNUNITED FRACTURE.

TO THE EDITORS OF THE 'PROVINCIAL MEDICAL JOURNAL.'

GENTLEMEN,—The publication of the letter in your last week's Journal, from Mr. Worthington, on the treatment of ununited fracture, has induced me to send you the following case, as I think it shows that union of bone, although long delayed, will at last happily take place.

On the 23rd of April last I was sent for to attend a Mr. D., of this parish, yeoman, who had met with an accident, from a kick from one of his horses; being absent from home, it was two hours before I arrived at his house, and, on making inquiry, was informed they were afraid his left leg was broken. On examining the limb very minutely, for tension to a certain extent had taken place, I found a double fracture of the tibia, about four inches apart, no doubt occasioned by the tip and heel of the horse's shoe. The fractures were reduced in the usual way, and the patient went on well for a month, at which time his wife called on me, and said her husband's leg grated. I immediately went to the patient's house, and found that on the least motion of the limb I could hear distinctly a crepitus; on inquiring how long they had discovered it, I was informed about four days previously, on his getting out of bed (contrary to my express orders), when he found his leg quite powerless. I removed the splints, and found that no union had taken place in the upper fracture, but the lower one going on well; I replaced the splints, and tried to convince him of the absolute necessity of the greatest quietness; but being of restless disposition, he did not attend to it, for at an end of the week, and five from the accident, I received the same message, and found the fracture precisely in the same state as it was before. No union having taken place and the crepitus being quite distinct, I now placed a large pad one on each side of the fracture, so that the pressure of the splints was immediately on it. Having well secured the limb, and the patient, now convinced of his error, keeping perfectly still, I had

every hope of a successful termination of a very troublesome case; and, on removing the splints six weeks afterwards, I found perfect union had taken place, and he is now quite recovered.

I am, Gentlemen,

Your obedient servant,

F. A. CLEEVE.

Bradninch, Oct. 31, 1842.

CASE OF SPASMODIC CHOLERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I must leave to the “cognoscenti” in cholera to determine whether the following case of it was Asiatic, or English:—

John Lewis, a labourer, in August last was seized with a severe cramp, as he called it, in the stomach; vomiting and purging speedily followed, and he fainted; this occurred about twelve at night. His wife gave him a glass of hot gin, but the spasms continued through the night, attended with vomiting, and purging of the peculiar whey-like evacuations that marked the cholera in 1831. Towards ten, a.m., it was thought that he was dying, and I was sent for; and, indeed, when I came, such a conclusion was in every way justifiable. His face was that of a person *in articulo mortis*, livid, collapsed, and covered with a cold perspiration; the extremities were quite cold and blue; the heart labored heavily and pulsated irregularly, but very slowly; the gastrocnemii muscles were contracted into a hard ball; the toes tightly drawn towards the soles; the abdominal muscles cramped in a tuberculated form. I had my finger on his pulse when the abdominal muscles relaxed, and he exclaimed, “I am dying—the cramp is in my stomach!” Suddenly a large gruel-like evacuation passed, and he threw himself from the curved position in which he was lying, on his back, half fainting from exhaustion; almost immediately the abdominal muscular parietes were violently contracting, and from his groans the pain must have been intense.

As a quantity of spirit had been administered without producing any relief; I gave him small quantities of thick gruel made with milk, water, &c., at rapid intervals; placed hot bricks to his feet, and caused his whole body to be rubbed with hot gin by nurses until the mustard cataplasms, previously ordered, were ready to be applied, when they were placed on the calves, thighs, and epigastric region. Having some protochloride of mercury, jalap, and scammony in my case, I made five grains of the first, twenty of the second, and five of the third into a powder, and gave it to him, leaving a similar dose to be repeated in four hours. The first powder remained on the stomach, and I was compelled to leave my patient for a short time. In half an hour I was sent for to visit him immediately, as the bowels had been violently relieved, and the attendants thought that death had taken place. He was lying apparently lifeless; an immense evacuation had passed, composed of large pieces of undigested beef and potatoes, of which food he had partaken largely on the preceding evening at supper. The spasms had left him, and, although his pulse was so feeble as scarcely to be felt, yet there was sufficient force to indicate the case was far from being hopeless.

I immediately gave him a wineglass of brandy and two drachms of spirit of nitric ether in half a tumbler of hot water, pouring it down his throat as quickly as circumstances would permit; the effect of this was soon evident; he rallied sufficiently in ten minutes to drink a second tumbler of hot water with half the previous quantity of brandy, and shortly after this a violent perspiration came on. Notwithstanding the great relief which he now experienced, spasms seemed to affect the muscular structures of the abdomen and thighs, and at three o'clock, p.m., so much had they increased that I deemed it necessary to give opium; I, therefore, administered a drachm and a half of tincture of opium in some mint-water, which produced a sleep in a very short time that lasted until the following morning. He soon became convalescent, but for many days after complained of great tenderness of the abdominal parietes and calves of the legs.

The exciting cause of this severe attack was the heavy supper which he had made, after working the whole day without taking food; large pieces of hard meat were swallowed, scarcely touched by the teeth, and washed down with no small quantities of beer, so that when, by the action of the stomach, these pieces were driven onward to the pyloric orifice, and from their magnitude and toughness could not be propelled through it, the irritation caused by these repeated and fruitless attempts was so great as to extend its influence to the intestinal canal; hence the severe symptoms which followed.

I am, Gentlemen,

Your obedient servant,

CONWAY EDWARDS.

Batheaston, Bath, Nov. 1842.

DIAGNOSIS OF INDIAN AND ENGLISH CHOLERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The last communication of Mr. Salter to your valuable Journal, on the Diagnosis of Indian and English Cholera, satisfactorily convinced me that the opinion I had entertained, on a perusal of his first, was too hastily formed, and the chief motive that prompted him in offering remarks on the cases I had published was, to use his own expression, “a purely scientific one.” In contrasting the two cases, and especially the latter one, with most of those that were published in the year 1832, when the malignant cholera was so prevalent and fatal in this country, I must still think that they bear a great resemblance in all their prominent symptoms to them; and if such, at that period, were deemed by pathologists as cases allied to Asiatic cholera, what reason have we now, on a reappearance of the same disease, to alter our opinion as to its true nature? Mr. Whyte, assistant-surgeon in the army about the year 1817, states, that “in India it frequently commenced with a watery purging. At an interval of generally from half an hour to five or six hours, and sometimes without an interval, the patient vomits a white fluid, uncombined in any instance with bile. There was soon great debility and sinking of the pulse; the extremities became cold; the eyes sunk in their sockets, and

the features expressed the greatest anguish. The most unfavorable and dangerous sign in the ordinary progress of the disease was a coldness of the surface over the region of the heart and stomach."

Dr. Venables, in speaking of the disease as it occurred in 1832, says, "The purging soon after the attack assumes a limpid, shreddy appearance—in fact, like rice water, with shreds diffused through it; this often continues for several days before vomiting comes on. Sometimes the purging is muddy or gruelly-looking, but never, after the first two or three days, presents any biliary or feculent appearance. Vomiting at length supervenes. The patient next becomes cold and pulseless; the tongue presents a most remarkable feeling of coldness. In rapid cases the patient becomes blue, and dies in from seven to eighteen hours."

Dr. Lichtenstadt, professor of medicine at St. Petersburg, when writing on the Asiatic cholera as it appeared in Russia as an epidemic in the years 1829 and 1830, says, "The first well-ascertained case of cholera, according to the official returns, occurred on the 22nd of August, 1829, at Orenburg. On that day a man was brought into the military hospital affected with vomiting, diarrhœa, intolerable pain in the belly, sunken features, blueness of the lips and skin, coldness of the extremities, cramp, imperceptible pulse, extreme exhaustion, and great anxiety; and, notwithstanding vigorous treatment, the patient died within twelve hours." He further states, "In a week more, on the 8th of September, a third person, a joiner, died after a twelve hours' illness." As his case is a very striking one in many respects, and completely dissipates the doubt entertained by some of the identity of Russian with the Eastern cholera, we may here give the particulars as it is related by Dr. Sokolov, the surgeon who attended the man. "The disease began, at two in the morning, with a dreadful purging, which returned every minute. Although the weather was cold and wet, the patient went out of doors, to obey the calls of nature, bare-footed and undressed, without any precaution. About five o'clock he was without feeling, quite powerless, and affected with cramp. At six I found him with sunken, pale-blue cheeks, dimness of the eyes, coldness of the feet and hands, and bedewed with clammy sweat. The exhausted, powerless condition of the patient, in particular his completely imperceptible pulse, both at the wrist and over the heart, the stiffness of the limbs, the coldness of the tongue and belly, left me no hope of recovery. The man expired."

The cases above recited bear a great analogy, in every essential particular, to those published by me. The rice fluid vomiting and purging, the blueness of the skin, the universal death-like coldness of the body, the sunken eyes, and the pulseless wrists—in-deed, the state of collapse in which I found my last patient—were convincing proofs of the identity of the disease with Asiatic cholera. It is true that cholera, as well as every other disease with which we are acquainted, may be modified from various circumstances, and, without great observation, may be mistaken for a different disease.

Having now endeavoured to lay before your readers opinions and facts in support of those I advanced in

reference to the two cases I published, I shall take leave of the subject of cholera, trusting that these observations may be the means of eliciting from others their opinions on so important a subject.

I am, Gentlemen,

Your obedient servant,

JOHN WICKENS WEST, M.R.C.S.L.

Poole, November 4, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, NOVEMBER 12, 1842.

The Statistical Society of London is pursuing its investigations of the various points connected with vital statistics in the most praiseworthy and persevering manner. Amongst the fruits of their researches is one peculiarly worthy of attention; we allude to "the Report of the Committee on Hospital Statistics," recently published in the society's journal, and also distributed extensively under the form of a pamphlet.

The uncertainty of medicine as a healing art—the great difficulty of determining the real value of any peculiar remedy or mode of treatment in any given disease, has been ever felt by the medical man, and is constantly cast as a reproach against him by the public. Every scientific practitioner must often have occasion to ask himself, in all humility, whether the cure of his patient was effected by the beneficent hand of Nature, or by the remedies administered—whether he has really been the instrument of shortening the duration of disease for a single hour—whether the termination of the malady was not the accomplishment of its natural course rather than the effect of well-directed skill and appropriate medicaments.

This unfortunate state of uncertainty must ever exist (as the reporters judiciously observe), and the progress of medicine as a science be extremely slow, unless we can obtain some standard of comparison whereby to determine accurately the relative value of different methods of treatment now in use, or of any new remedies and methods of treatment which may be discovered hereafter. Without some standard of this kind, medicine will always be open to unjust charges of inutility, and the public health, to use the words of the report, will be the sport of fashion, the perilous innovations of empirics and superficial theories.

The great desideratum is to ascertain the average and inevitable loss of life accruing from each disease. Some writers, especially those of the French school, pretend that an essential point towards the attainment of this object is to ascertain the mortality and duration of each disease when left to itself; but, for obvious reasons, we can never attempt to determine questions of this kind on a large scale in a civilised

state of society. "It is scarcely necessary to observe," says the report, "that the natural mortality and duration of diseases can never be supplied. The thing can never be even contemplated. No one would dare to suggest that hundreds or thousands of patients should be deprived of the aid, solace, and counsels of medical art, which has been cultivated for centuries by a numerous profession, containing in its ranks many persons of the greatest scientific attainments, and a few men of the most consummate genius. We cannot ask patients to allow the stone to torment them, or to incur the natural risks of loss of blood, unreduced ruptures, broken bones, inflammations, in order to enable speculating sceptics to count how many of them will die."

We must, therefore, look for some other mode of deciding the question; and it is fortunate that the required standard will be furnished by the average mortality and duration of cases *under the present system of treatment*. In the aggregate results; deduced from a very large number of cases treated in the different hospitals, any accidental irregularities will be destroyed, and the average rate of mortality

and recovery in each disease, at each age and at each stage of disease, will be determined. Here, then, we have a standard with which any other class of similar cases, treated differently, may be compared.

For the purpose of carrying out the above-mentioned object, and obtaining a fixed standard of comparison, the Statistical Society has obtained returns from most of the London hospitals, and expresses a hope that similar information will be afforded by the numerous establishments for the relief of the sick which exist throughout the provinces. We feel assured that provincial practitioners will not fail to contribute their share to the furtherance of such wise and benevolent views.

As an illustration of the system pursued by the society, we shall notice a few of the results obtained by their inquiries connected with the vital statistics of the London hospitals. The metropolis contains ten general hospitals, besides the Fever and Small-pox Hospitals, the Lock, the Seaman's Hospital, and several lying-in hospitals and lunatic asylums.

The following table shows the population of these hospitals on the night of the 6-7 June, 1841:—

POPULATION AND MORTALITY OF THE LONDON HOSPITALS.

Name of Hospital.	Number of Patients, June 7, 1841.			Number of Persons employed in the Establishment, or Resi- dent on June 7, 1841.			Grand Total.	Deaths in 1839.
	M.	F.	Total.	M.	F.	Total.		
St. George's	178	134	312	10	46	56	368	250
Westminster	68	75	143	6	22	28	171	95
Middlesex	109	103	212	9	36	45	257	156
Charing-cross	43	46	89	6	13	19	108	102
King's College	56	45	101	6	20	26	127	—
University College	56	45	101	9	15	24	125	194
Fever	14	15	29	1	10	11	40	161
Small-pox	15	10	25	2	7	9	34	28
London	205	108	313	11	60	71	384	311
St. Bartholomew's	194	192	386	22	125	147	533	361
Guy's	251	192	443	49	161	210	653	219
St. Thomas's	125	116	241	22	81	103	344	244
Dreadnought	168	—	168	17	9	26	194	110
Total	1482	1081	2563	170	605	775	3338	2231

From returns obtained from seven of the London hospitals,* the following particulars were derived:—1, The number of persons in the hospitals of different occupations; 2, the number of each sex suffering from the several diseases at different ages; 3, the period of the several diseases in which patients were admitted; and 4, the time that they remain under treatment. From these data several important particulars are deduced, especially when used in conjunction with

the abstract of deaths and causes of death at different ages in the London hospitals (1839), published in the Registrar-General's last report. Thus the mortality in a given time (a year) of any disease may be obtained by comparing the annual number of *deaths* from the disease with the average numbers *laboring under the same disease*. The following table illustrates this principle:—

* We are sorry to say that the medical officers of the two great borough hospitals neglected to comply with the request of the committee.

	Diseases.	Died in the Hospitals in One Year. (Reg.-Gen. Report.)	Average Numbers Sick, (deduced from Table A.)*	Annual Deaths per cent.	Constantly Sick to 100 Annual Deaths.
1	Consumption	342	95	360	28
2	Pneumonia	47	15	313	32
3	Apoplexy	39	17	229	44
4	Injuries, and the effects of Accidents .	390	450	87	115
5	Bronchitis	88	111	79	126
6	Paralysis	42	55	76	131
7	Syphilis	13	110	12	846
	All diseases	2231	enumerated. 2462	91	110

This table shows us that if there were 95 consumptive persons on an average in the hospitals, 342 died during the year; 360 per cent. annually, 36 per cent. in 36½ days, or 1 per cent. daily. A physician who has, on an average, 100 consumptive patients under his care, in the advanced stage of the disease, may at this rate expect that one would die every day.

The relative *force* of mortality, in different diseases, may be obtained in the same manner. Thus it appears that, in the general hospitals of the metropolis, 91 deaths occur annually for every 100 patients which they hold. An hospital which contains 110 patients furnishes 100 deaths. Let us suppose (say the reporters), for a moment, the patients laboring under consumption, pneumonia, &c., in separate hospitals, each containing 100 patients, the place of the dying being constantly filled up by new patients, then we shall have, according to the last column but one of the above table, at the hospital, for consumption, 360 deaths; for pneumonia, 313 deaths; for accidents, 87 deaths; for bronchitis and catarrh, 79 deaths; for paralysis, 76 deaths; for syphilis, 12 deaths; or, according to the last column, 100 deaths would occur annually in an hospital for the consumptive containing 28 occupied beds; in an hospital for accidents containing 115 beds; and in an hospital for syphilis containing 846 beds.

The mortality, in a unit of time, at each age, from the different diseases, may be calculated from the enumeration of the patients, and the registered deaths. We must, however, remark, that the deductions which we have just mentioned are merely intended as illustrations of what might be obtained under a careful and extensive registration of observations.

The council of the Statistical Society is about to apply to the governing boards and medical officers of the different hospitals throughout the country for assistance in the carrying out of their views, and we sincerely trust that their laudable efforts will be duly seconded.

* The total numbers of patients laboring under each disease in the hospitals were multiplied by 2.5, to make them correspond with the deaths in the first column, because this column was calculated on 2½ times as many facts.

ACADEMY OF SCIENCES, PARIS.

October 31, 1842.

NASAL POLYPI.

M. Leroy d'Etiolles addressed a letter, in which he mentioned the various methods adopted for the ligature of nasal polypi when large and deep seated. The method of Brasdor, which consisted in passing the ligature from the mouth through the posterior part of the nares, was not the discovery (according to M. Leroy) of that surgeon, but of a non-medical person, Roderick of Cologne, who cured himself of a polypus in this way. The chief defect of this method lies in the difficulty of applying the ligature close to the insertion of the tumor; the loop is easily formed behind, but in front it does not completely embrace the root of the polypus, and hence the latter is often imperfectly cut through, and grows again. The instruments forwarded by M. Leroy enable the surgeon, as he thinks, first, to carry the ligature higher posteriorly; second, to separate the two threads of the ligature anteriorly, carry it up higher, and tie it more firmly.

STRICTURE OF THE URETHRA.

M. Mercier addressed a letter to the academy, in reply to some observations on this subject, recently forwarded by M. Civiale to the same body. The author contests the claim of M. Civiale to priority in several points, and asserts that he is in error when he denies the existence of stricture in the membranous part of the urethra. M. Mercier likewise shows that the treatment by caustics is not so generally adopted by surgeons as M. Civiale seems to think.

KERATOPLASTY.

M. Feldmann communicated the results of some experiments which he had made, in conjunction with Dr. Davis, of Munich, on transplantation of the cornea.

When the cornea is detached from the rest of the globe of the eye in an animal, and immediately reapplied by means of sutures, it unites again; and the same union takes place, even when the cornea is transplanted from the eye of one animal to another, its transparency remaining uninjured. The first experiments of this kind were made in 1818, by M. Reisinger, of Augsburg, and repeated, but without success, in 1831 by M. Dieffenbach. MM. Himly

and Thomé, of Bonn, subsequently obtained some satisfactory results; but it was chiefly by the ideas of Walther, of Munich, that the author's experiments were suggested.

ACADEMY OF MEDICINE.

November 3, 1842.

INTRODUCTION OF AIR INTO THE VEINS.—INSTANTANEOUS DEATH.

M. Amussat communicated the following interesting case, which had been forwarded to him by M. Gorré, senior surgeon to the Boulogne Hospital:—

Joseph Morel, fifty-eight years of age, was admitted into the hospital in the early part of October, 1842. On the left side of the neck was a scirrhus tumor arising close to the clavicle, and extending upwards into the triangular space formed between the ramus of the lower jaw, the sterno-mastoid muscle, and the thyroid cartilage. As the patient was greatly reduced by pain and frequent hæmatemesis, it was thought necessary to remove the tumor. The operation was performed on Saturday, the 29th of October, 1842. The patient having been placed in a convenient posture, the whole surface of the tumor was exposed by a crucial incision and dissection of the flaps; it was then detached from the subjacent parts, and the vessels tied; the loss of blood was trifling. The separation of the tumor was all but completed, and the operator was dividing, with a stroke of his knife, the last fibres which retained it, when he heard a gurgling sound extending from the wound towards the heart. The patient immediately became pale, and his respiration accelerated; he cried faintly, "I am dying," and instantly fell back dead. Although the peculiar sound at once indicated the nature of the accident, death was too sudden to admit of any attempt being made to prevent the unfortunate result. The operator placed his finger at once on the wound to close the vein, if possible, but without effect. During five or six minutes after death a movement of flux and reflux was distinctly perceived in the right jugular vein.

The body was examined twenty-four hours after death. At the lower part of the wound, the internal jugular vein had been opened about $8\frac{1}{2}$ lines from the subclavian; the opening was from $2\frac{1}{2}$ to $3\frac{1}{2}$ lines in length, and its edges were separated from each other. On pressing the vein upwards, the blood escaped, mixed with numerous air bubbles. The anterior wall of the chest was now removed, and the lungs were seen exactly filling its cavity; they contained a considerable quantity of frothy mucus. The right side of the heart was distended, and also contained blood mixed with a great quantity of air bubbles; the blood was fluid, and much less deeper in color than venous blood generally is. The superior vena cava, subclavian, axillary, and brachial veins also contained fluid blood mixed with air bubbles; the vessels distributed over the surface of the brain were marked here and there by similar bullæ of air. The sinuses did not contain air or blood. The left ventricle did not present any trace of air, but blood mixed with it was found in the aorta and iliac arteries.

From the preceding case the author concludes—

1. That the patient's death evidently depended on

the introduction of air through the wound in the jugular vein.

2. That the introduction of air was favored by the tractions exercised on the tumor at the moment the vein was opened, the proximity of the wound to the chest, and the feebleness of the patient.

3. That the sudden death depended on the instantaneous suspension of respiration, circulation, and nervous action.

4. That the admixture of air with the blood must exercise some *special* deleterious influence on man; for in the numerous experiments made on animals by MM. Amussat, Nysten, and Magendie, death never occurred so suddenly as in the present case.

DEVIATION OF THE UVULA.

M. Diday forwarded the particulars of a case of facial hemiplegia of the left side, in which the uvula deviated considerably to the right. The deviation gradually disappeared with the other hemiplegic symptoms. The author considers this case as a proof of the connection between the movements of the velum palati and the facial nerve—a connection which anatomy had not, as yet, enabled us to prove.

SOCIÉTÉ MÉDICALE D'ÉMULATION.

Paris, September 14, 1842.

HISTORICAL NOTICE OF THE TREATMENT OF PHTHISIS.

A report by M. Gilette, on a memoir of M. Payen, contains the following curious particulars:—

The great majority of the modes of treatment of phthisis which we are accustomed to regard as new, and which have been produced and disappeared within the last twenty years, were familiar to medical practitioners of the Greek and Roman schools. Thus, after 2,000 years of useless efforts, we find ourselves reduced to the treatment employed in the time of Galen and Celsus. Consumptive patients were at that time ordered to Alexandria, even as our rich patients are sent to Italy, and those who were unable to bear the voyage, were sent on short sea excursions, or directed to travel, in litters, along the sea coast. The milk of goats or asses was particularly recommended after the occurrence of hæmoptysis, and the asses were fed with such care that their excrements were examined every day. The milk, according to Galen, should be drunk at Tabies, a small town situated between Sorentum and Naples, extremely well sheltered from the wind, and where the pastures contained a quantity of herbs which rendered the milk slightly astringent. In cases where the stomach participated in the pulmonary irritation, the Greek physician preferred human milk; "but the majority of patients (he remarks) refuse to submit to this diet, and as they won't be treated like children, let us treat them like young asses."

When the emaciation and cough were on the increase, revulsive plasters and the actual cautery applied to the upper part of the chest, were freely had recourse to. (*Celsus, lib. iii. c. 2., Galen, l. iv. c. 13.*) Active purgation was generally avoided, but Prosper Alpinus (*De Meth. Ægypt., l. iv.*) mentions that some patients in an advanced stage were cured by the use of violent purgatives, as colocynth. Here we find the experimental method taking the place of the rational.

Pliny the elder gives us an account of the various attempts made to subdue the disease. Almost every medicinal substance known had been tried in the treatment of phthisis; he strongly recommends a sojourn in pine-tree woods, and affirms that the air of such localities is much more conducive to the health of phthical patients than voyages to Egypt or drinking milk on the mountains during summer. Pitch was employed externally, and internally in the form of bolus mixed with butter and honey; squill, horehound, and hyssop, were in very general use; mastic was thought to possess a special virtue. Amongst the mineral substances we find several which have been more or less in vogue in modern times; salt enjoyed a high reputation. *Multi tussim veterem linctu salis discutere*, says Pliny. Plutarch tells us that a physician, named Apollonius, fed his consumptive patients on salted food, and Hippocrates recommends the same kind of diet for chronic coughs. The mineral sandarach, which the commentators regard as the red sulphuret of arsenic, was also considered an excellent remedy for chronic cough; it was given in bolus mixed with turpentine, or the vapor inhaled with that of burned cedar.

BIRMINGHAM PATHOLOGICAL SOCIETY.

October 1, 1842.

Dr. J. B. MELSON in the Chair.

FUNGOID DISEASE OF LEG.

Dr. Fletcher exhibited to the society the cast of a fungoid tumor, about the size of the head of a fœtus, which occupied the lower and inner portion of the right leg and ankle, for which the limb was amputated by Mr. —, of Solihull. Dr. F. also showed two preparations of the tumor, illustrating its structure and the close approximation to the lower part of the tibia and bones of the ankle-joint without implicating them in the disease.

Dr. Fletcher said, that in the specimen the bones themselves and the periosteum appeared healthy, whilst half their circumference was closely approximated to the fungoid tumor; indeed, so much was this the case, that there might be a doubt whether the disease did not originate in the periosteum, in which latter opinion Mr. Hodgson agreed. This specimen, with the cases which had been previously submitted to the society, in which the disease had commenced in the tissue of the bone itself, formed, Dr. Fletcher thought, a complete contradiction to the opinion published by the author of the article on the pathological conditions of bone in the "Cyclopædia of Anatomy and Physiology," under the head of Cancer Fungus Hæmatodes, who says (page 463), "We have already more than expressed a doubt that either of these diseases ever originated in the osseous structure, or could be considered as properly appertaining to it," and argues that, when the bones are affected, it is by the disease spreading to them from contiguous parts; but in the present case the disease had not at all affected the bone, and several other preparations which had been exhibited showed the disease in the bone, and the contiguous soft parts had remained healthy.

Mr. Hodgson said he thought that there could be no

doubt that fungous disease might originate in all tissues, and exhibited drawings representing the disease confined to the cancellated structure of the bone, taken from a patient of his own. Mr. H. also showed the drawing of a case, in which the disease was confined to the medullary structure of the humerus; the head of the bone was considerably enlarged, and the disease extended about half way down the shaft in its medullary cavity, without increasing the external size of the bone. A drawing, showing the external appearance of the shoulders, was also exhibited. Thus, he remarked, the three representations of the disease before the society showed distinctly three kinds of origin.

LARDACEOUS TUMORS OF BONE.

Mr. Hodgson then exhibited to the society a specimen of very extensive disease of the bones which occurred in an intellectual boy of four years of age. In the early stage of the case, when Mr. Hodgson saw it with Mr. Thomas Chavasse, the tumors were not large; there was one small tumor in the lower jaw and another in the parietal bone, but they soon increased; then another made its appearance in the orbit, and protruded the eye; another appeared at the back of the head, and grew enormously, becoming as large as the head itself. The protrusion of the eye increased to a great extent, and yet, what was very remarkable, without loss of vision. The intellect also continued unimpaired, though the tumors on the head were very large and closely connected with and compressing the brain to a considerable extent; the child's intellect was clear to the very last; he played about the room the day before he died. The tumor in the frontal bone was of a lardaceous character, soft, and yellowish; it extended inwards and caused ulceration of the arachnoid and pia mater. The pleura, liver, and kidney were also diseased.

Mr. Hodgson mentioned another case, which was in the General Hospital some years ago; here the tumor was seated on the back of the head of a boy, and became larger than the head and face of the subject of the disease. In this case, also, the intellect was never affected, the boy appearing to die worn out by constitutional irritation produced by ulceration of the external part of the tumor. His immunity from cerebral and intellectual aberration, Mr. Hodgson thought, could only be accounted for by the circumstances of the disease having begun from without, and gradually extended inwards, the cranial bones being thus softened, and in some degree allowing of expansion taking place, and preventing pressure. In the last-mentioned case, the occipital and a large portion of the parietal bones were nearly destroyed. There was no other disease found in other parts of the body. In the former case there was ulceration of the membranes and softening of the cerebral substance beneath the ulcerated portions, yet in neither case was there the usual symptoms attendant upon such a state of parts. Mr. Hodgson knew of no causes to which the diseases could be attributed; a pallid, waxy appearance of the patient might be remarked, but that appearance could not be regarded as a precursor of this form of disease, though it betokened an unhealthy or strumous constitution. He could not consider the medullary disease to be hereditary; he thought hardly two cases could be found in which it had occurred in

more than one member of a family, though he knew of one such case in which fungoid disease of the eye had attacked two children of one family in succession; a third child has continued free from it.

ANEURYSM OF ABDOMINAL AORTA.

Dr. Melson brought before the society a case of abdominal aneurysm which had occurred in the Queen's Hospital, chiefly because it illustrated with much distinctness one of the causes of this formidable affection, and secondly, because the history of the case showed how much the precise situation of the lesion might be obscured by the direction assumed by the tumor.

CASE.—William Mumford, aged twenty-seven, a striker for engine work, married, and of a nervo-bilious temperament, was admitted into the Queen's Hospital on August 18, 1842. His father had died suddenly, having been in good health up to the time of his decease, when he was fifty-two years of age, and said to have had diseased heart. In January last the patient had sustained great mental uneasiness, and on leaving Warwick gaol, where he had been imprisoned for a month, was much reduced in health and strength. On his return home, after his imprisonment, he ran six miles behind a coach, which brought on very violent palpitation of the heart. Unable to run any longer, he sat down on the ground, and never after regained his former state of health. About a fortnight after this occurrence he perceived what he called "a small jumping tumor" in his abdomen, about an inch below the umbilicus, of the size of a pigeon's egg, very hard, and disappearing when he stood upright. From that time to the day of his admission the tumor has gradually increased, and is now, August 28, rather larger than an orange; it is well defined, and when the patient lies upon his back it is most prominent at the umbilicus, moving a little to the right or the left with the altered position of his body. A strong pulsation is felt over the tumor, and a loud *bruit de scie* is heard, especially over the umbilicus. He has intense pain in the loins, and in the left hip and thigh; the left leg is somewhat colder than the right, and is very numb; the pulsations of the femoral arteries are feeble; tongue coated; appetite much impaired, but no vomiting; bowels constipated; heart and lungs healthy, though he has had occasional palpitations of the heart; pulse at the wrist feeble and frequent; he complains much of weakness, and is unable to walk. To have twenty drops of the sedative solution of opium, in water, when the pain is excessive; mustard poultices to the knee; castor oil.

Aug. 20. Pain much relieved by the mustard applications.

24. Had passed a very restless night, experiencing now and then a sudden starting of the left leg; he thinks the tumor larger and more prominent. Continued medicine.

Sept. 9. During the last week the tumor has been very painful, and the jumping has been constantly and severely felt; he is much disturbed by cramp and spasm of the left thigh, especially when dozing; throughout his illness he has been much troubled with micturition, and has on several occasions passed large quantities of limpid urine; his urine to day is like diluted port wine—clear, acid, and free from albumen, crystallising readily on the addition of

nitric acid. Its specific gravity 1025. Continue remedies.

10. The pain in the back, hip, and now, for the first time, in the inner part of the thigh are excruciating; great anxiety of countenance; opiates take little effect, pulse becoming more frequent and feeble; urine is very scanty, neutral, and of a lighter color. Specific gravity 1017; no crystallisation by nitric acid. Extract of belladonna and sesquicarbonate of ammonia, of each a drachm; for an epithema, to be applied at once to the hip.

12. Yesterday and to day has been more composed, and has had a little quiet sleep; urine high colored and depositing a pinky sediment. The abdomen, however, is still exceedingly tender, and the pains are very severe; nausea; thirst; pulse very frequent; now and then profuse perspiration. He is emaciating rapidly.

13. The tumor is encreasing towards the left side; he is constantly sick; the papillæ of the tongue are very red and prominent; pulse 120; pains in the thigh are not diminished; urine depositing a copious pinky sediment. Repeat epithema; continues other remedies.

15, Three, a.m. Several severe "jumpings" have been experienced in the tumor, accompanied with great prostration of strength. Pulse at the wrist imperceptible; countenance exsanguine; cold perspirations; bowels confined; and he has passed no urine since yesterday morning. To have, at once, a drachm of aromatic spirit of ammonia in water.

Ten, a.m. Has rallied; but his countenance is still pale, and the pulse scarcely perceptible. Repeat draught; to have an enema of warm water.

Six, p.m. Bowels opened by the enema. He has passed no urine; spasms occasionally violent.

16. During the night he rallied again, and took some porter. The tumor, formerly distinct and compact, is now largely dispersed. He died at eleven, a.m.

Sectio Cadaveris Thirty Hours after Death.

The body was more than usually bloodless; bowels slightly swollen, and a hard tumor occupied the whole of the left hypochondriac and lumbar regions. On opening the abdomen, a large quantity of bloody serum escaped, and about a pound and a half of crassamentum was removed. The omentum and mesentery were black with extravasated blood. The bowels, liver, spleen, and pancreas were healthy. The intestines being removed, a large tumor, consisting chiefly of coagulated blood effused behind the peritoneum, and enclosing the left kidney, was discovered, extending down the whole of the left side of the lumbar vertebrae; this tumor was about ten inches long and three broad. The aorta, having been carefully dissected from above downwards, was found to have given way at its bifurcation, and to communicate with an aneurismal sac capable of containing twelve ounces of fluid; the sac surrounded the commencement of the left common iliac, and its parietes were more attenuated on the left, whilst on the right side they were thicker and firmly attached to the bodies of the third and fourth lumbar vertebrae which formed the posterior boundary. Inferiorly there was a small pouch from which the right common iliac seemed to arise; the sac had given way posteriorly and to the left side, where the fibrinous layers were thinner and more attenuated; the bodies of the third and fourth

lumbar vertebrae were absorbed, the intervertebral cartilages running as usual; the inner coat of the aorta was throughout perfectly healthy and free from atheroma.

ENCEPHALOID TUMOR OF ABDOMEN.

Dr. Blakiston presented a specimen of tumor contained in the abdomen, of which the following is the history:—

CASE.—John Davenport, aged twenty-nine, lapidary, was visited by Mr. J. Elkington, February, 1841, when he stated that he had been in the habit of keeping close to work, and had for some time been troubled with a bilious complaint; he complained of great pain in the right hypochondriac region, and slight tenderness on pressure; also of great fulness after his meals. He frequently vomited; his bowels were occasionally very obstinate; mercury invariably brought on jaundice. In December of the same year he experienced no pain, but great distension after food, and a hard substance was felt in the right hypochondriac region. In May, 1842, he was jaundiced, and greatly emaciated; he was very low, and had an anxious, pinched countenance; at times he had cramp in the bowels; bowels can only be relieved by enemata, when a great deal of mucus, some large scybalæ, and sometimes rolls of faeces, came away. There is not much pain; he vomits for two or three days together; a tumor, supposed to be in the liver, is traced under the right ribs, with rough nodules on it; the course of the intestines is marked out by flatus; appetite was tolerable, but liquids produced much distension. He died, gradually worn out, August, 1842.

Secitio Cadaveris.

Both lungs were compressed, and almost carnified, especially the left—the right by the liver, which was pushed up into the thorax, the left by the stomach, which ascended on that side; only a trace of the liver could be seen a little to the right of zyphoid cartilage; the stomach was amazingly distended, extending from half way up the thorax, on the left side, downwards towards the right, entirely over the abdomen, having been apparently pulled to the right side by a large mass of crude encephaloid matter, in the form of tubera, engendered in the gastro-hepatic epiploon, and adhering to the pylorus and duodenum. It lay under the pyloric extremity of the stomach, and under the gall-bladder, and over the pancreatic portion of the duodenum, which was, as it were, wound round it and compressed it.

SHEFFIELD MEDICAL SOCIETY.

Oct. 20, 1842.

The PRESIDENT in the Chair.

INTERNAL HÆMORRHAGE.

Dr. Favell exhibited portions of the liver and stomach of a woman, who was murdered by her husband a few months ago. The case excited some interest in this town, from the circumstance that, after effecting his purpose by repeatedly stabbing her with a knife, he informed a relative, and then laid himself on the bed beside her, until her friends were fetched from a distance. The woman died from internal hæmorrhage. The weapon (a common pocket-knife) had penetrated and passed through the thin edge of the right lobe of

the liver, dividing in its course an artery of considerable magnitude; and had also passed through the coats of the stomach.

A portion of lung, removed from the body of a fork-grinder, was exhibited by Mr. Porter. The case will be brought shortly before the society. Inspections of grinders have hitherto been exceedingly rare, from the repugnance of this class of workmen to allow of any examination.

FRACTURE OF THE SKULL.

Mr. Overend introduced the following case:—

Sampson Fell, aged fifty-one, ostler, was admitted into the Sheffield Infirmary, about four, p.m., on September 20, 1842.

The persons who brought him stated, that while dressing a vicious horse in the street, he had been violently kicked on his head, and fell with great force with his head on the curb-stone. Skin cold and clammy; pulse weak and small—"a miserable pulse;" pupils sensible to light; he was so far conscious as to be able to tell his age correctly. There were two scalp wounds—1, on the top of the nasal bones; 2, on the left side of the head, near the union of the temporal, frontal, and parietal bones.

Between these wounds the scalp appeared to be separated from the cranium, and the cellular tissue crepitated, as if the fracture extended into the frontal sinuses; the finger, being passed into the wound, detected a longitudinal fracture of the frontal bone.

Sept. 21, Three, a.m. Reaction had taken place. He exhibited his tongue when requested to do so; had no consciousness of having suffered any accident. He always asked for the chamber-pot, and always used it out of bed.

23. He got out of bed, raised his shirt, and sat down on the vessel without assistance.

24. The house-surgeon, on visiting him, desired the nurse not to allow his friends to speak to him. The patient said, "Is that the doctor?" and being replied to affirmatively he said, "Then, if any body speaks to me, knock 'em o'er. He never told his age correctly after he was conveyed up stairs on admission. To repeated inquiries his answer invariably was "sixteen." No stertor.

25. In the night he exhibited symptoms of coma, and he died at seven, a.m., of the 25th.

Treatment.—Sinapisms, bleeding, turpentine enemata, calomel.

Inspection, Thirty-seven Hours after Death.

The scalp was much thickened, and except at the posterior part was separated from the cranium.

The calvarium and brain being removed, a fracture was found, 1st, of the frontal bone, just above its nasal process, under the first-mentioned wound, extending downwards, outwards, and backwards through the left orbital plate to its middle; then, passing nearly at a right angle, it crossed the cribriform plate of the ethmoid, dividing the crista galli; it thence extended towards the right, and terminated near the outer edge of the right orbital plate.

2nd, Commencing again at the wound, a fracture passed irregularly upwards and outwards to the left, through the frontal bone into the parietal; it then turned almost at a right angle downwards, entered the squamous portion of the temporal at its superior margin, dividing it completely; crossed the sella turcica,

traversed to the extent of about an inch and a half the inferior portion of the squamous portion of the opposite temporal bone, in the pars petrosa of which it finally terminated. Two triangular portions of bone were completely separated, one near the wound above the nose, and another where the fracture dipped down from the parietal to the temporal bone of the left side, and appeared to correspond to the caulking of the shoe.

3rd, Again commencing at the same wound, a fracture passed to the right side upwards, along the frontal bones, entered the parietal about the temporal arch, passed through the upper portion of the squamous portion of the temporal bone, and then again passed into the parietal at its posterior and inferior part, and, passing into it about half an inch, there terminated.

The dura mater was lacerated in three places—one under the external injury No. 1, another half way between the two triangular fractured portions of bone, and the third at the base of the skull, corresponding with the fracture in the left temporal bone. Under the left middle lobe a teaspoonful of blood coagulated was found.

Dura mater highly injected and separated from the bone, more especially from the clinoid processes of the sphenoid. It was very much thickened in the neighbourhood of the fractures, presenting the appearances of inflammation of the membrane. On cutting into the brain the puncta were very numerous and distinct.

This case was one of peculiar interest, from the symptoms not being commensurate with the amount of injury. In the opinion of Mr. Overend this mildness of symptoms was dependent on the laceration of the dura mater, relieving the compression which would have resulted from the effusion, and the subsequent inflammation of the membranes. From this case he was induced to think that, contrary to the received opinions, it would be justifiable in cases of fracture, where the trephine had failed to relieve the symptoms of compression, to divide the dura mater, thereby diminishing the pressure caused by the effusion primarily, and by the want of elasticity of the membrane the result of inflammation afterwards. The case excited considerable discussion, more especially the suggestion of dividing the dura mater.

MEETING OF THE MEDICAL PROFESSION OF SHREWSBURY.

A meeting of the following medical practitioners of this town was held at the Lion Hotel on the 25th of October:—Dr. H. Johnson, Mr. Arrowsmith, Mr. W. J. Clement, Mr. Dickin, Mr. Clarke, Dr. Drury, Mr. Gill, Mr. Wood, Mr. Griffiths, Mr. Keate, Mr. Onions, Mr. Bratton, Mr. Cartwright, Mr. Crawford, Mr. Heathcote, and Mr. Foulkes. In consequence of the unavoidable absence of Rice Wynne, Esq., Dr. Johnson was called to the chair, and having briefly explained that the object of this meeting was to adopt some resolution respecting the payment of fees by life assurance companies,

Mr. Cartwright rose and proposed a resolution to the effect that they pledged themselves not to answer the inquiries of insurance offices, unless accompanied

with a fee of one guinea. It was evident, he said, from the frequent publications in various periodicals, and from the present meeting, that the system adopted by insurance offices of obtaining medical certificates was practically wrong, founded on erroneous and, in his opinion, dishonest principles; at any rate, the system was highly offensive to the feelings and injurious to the interests of the profession. As the offices had not acted in a conciliatory spirit, but had uniformly met their remonstrances with indifference and slight, surely they had a right, and ought, in self-respect, to pass such regulations as might conduce to their own convenience and interests. He then drew their attention to the distinction between a medical referee and a medical attendant. The medical referee was appointed by the officers, was their agent, and was paid by them; whilst the medical attendant was made, by a rule of the offices, the agent of the applicant, and was scarcely ever paid for his services. If a decisive majority of the meeting (say nine out of ten) agreed not to act as medical referees, unless paid the fee of one guinea in every instance, he could not believe that the one or two in the minority would act in opposition to their wishes, or behave in a manner which would have the effect of placing them in enmity with, and exposing them to the contempt of, their professional brethren; he did not think the insurance companies would have confidence in characters so mean and selfish, but he felt certain there would be no difference of opinion amongst them, and that the matter might be considered as settled. With regard to the medical attendant, there could be no competition in his case; he was made, as before stated, by a rule of the office, the agent of the applicant, and was seldom or never paid. On the one hand, the applicant urged the certificate was to give information to the office, and probably contained objections to his health; the office, on the other hand, contended that the insurance was for the benefit of the applicant; but they both agreed to leave the medical man unremunerated. He then remarked that the drift of the arguments on the side of the offices in the "British and Foreign Medical Review," in the "Lancet," and in the "Provincial Medical Journal," was, that the offices always refuse to assure, unless supplied with a proof of health by the applicant, and consequently, if payment was required for such certificate, the applicant ought to pay, and not the office. The assurance offices might make what terms they pleased with the applicants, but if two parties made a rule which affected a third party, surely that third party had a right to make a rule to counteract the unpleasant and injurious effects which flowed from the first. He then read an extract from the "Polytechnic Journal," and mentioned, in continuation, that there were several letters in the "Lancet" and in the "Provincial Medical Journal," advocating the right of the medical attendant to be paid by the office, and strongly repudiating the idea of any public body or private individual claiming as a right the gratuitous services of the medical profession. He then read the following resolution, passed in 1837 by the British Medical Association:—

Resolved—"That the members of this association pledge themselves not to answer the inquiries of insurance companies, unless accompanied by a fee."

The Southern District Branch of the Provincial Association had likewise adopted a similar opinion. He next read the following valuable and interesting remarks from the "Provincial Medical Journal:"—

"The practice of offices we believe to be this, that the offices and directors satisfy themselves that the life proposed is tolerably good, which they do by personal observation, or by reports from their agents or their own medical advisers; they pay little regard to the report of the party's own medical adviser, or the statement of his friends, but retain those documents to be minutely scrutinised and compared in every particular with each other, and with the party's own statement, when a demand for the debt comes to be made.

That we have fairly stated the nature of the policy or contract of assurance between the assurers and the assured, may be seen by examining any of the cases which have been argued in the courts of law, upon the grounds of mis-statement, concealment, or error. At first sight it would not be easy to imagine that a policy could be vitiated, or that a court of law would deprive a creditor or a dependent family of a sum of money purchased by a long succession of yearly payments, upon the mere ground of an *unintentional* omission or an *innocent* mistake, committed by the original contractor, or his doctor, or his friend, or a parish clerk; but such is the rule well known to insurance companies, and confirmed by many judicial decisions.

Such is the established rule of practice and of law; and having at command such a mighty engine of defence against almost every claim which a company think proper to dispute, it will not appear to be wonderful that they should be unwilling to pay one guinea to obtain a report, which in proportion as it is carefully, cautiously, and conscientiously prepared, may, to that extent, be useless to them when they come to be called upon to obtain a defence."

After having read the above extracts, Mr. Cartwright adduced several other arguments, the substance of which will be found in our last number, and concluded by moving that "we pledge ourselves not to answer inquiries of insurance offices, unless accompanied by a fee of one guinea."

Mr. W. J. Clement seconded the resolution, expressed his cordial concurrence with the sentiments of the proposer, and trusted they would all see the advantage of acting with unanimity on that most important subject.

A desultory conversation then ensued, during which it was stated, that the London, Edinburgh, and Dublin Office paid £1 ls. in all cases to the medical attendant, as well as to the medical referee; the Britannia, the Protestant Dissenters and General Assurance Company, the Commercial and General Life Assurance Company, and the National Provident Institution, and several other offices, were, in some instances, in the habit of paying the medical attendant.

The resolution having been unanimously carried the pledge was immediately signed by each gentleman present.

Mr. Cartwright was then appointed hon. secretary to the association, and requested to send a circular to all the practitioners in the country, soliciting their assent to the above resolution. Thanks were then voted to Mr. Cartwright and Dr. H. Johnson, respectively; to the former for his zeal and activity in obtaining much valuable information, which had materially contributed to the success of the meeting, and to the latter for his able services as chairman.

The following gentlemen, who were unable to attend the meeting, have since signed the resolution, Mr. Wynne, Mr. Clement, Mr. Pidduck, and Mr. Stevens. —*Salopian Journal*.

STRUCTURE OF FIBRINOUS EXUDATIONS, OR FALSE MEMBRANES.

ORIGIN OF FIBRE.

It has been very commonly supposed that fibrine only exhibits an organised appearance when it has coagulated in contact with the living textures. In his Notes and Appendix to "Gerber's Anatomy," Mr. Gulliver has explained and depicted a most distinct structure in fibrine, which has set either within or out of the body simply from rest, and a similar character is shown in a false membrane. He now gives several more figures to exhibit the analogy in structure of fibrine coagulated merely from rest, and fibrinous exudations resulting from inflammation.

This structure is made up of fibrils of extreme delicacy and tenuity, and of corpuscles possessing the characters of primary cells or organic germs.

Of late years the origin of fibre, as well as of all other tissues, has been ascribed to the growth of cells; but the observations of Mr. Gulliver render it probable that cells are not essential to the formation of all textures, since it would appear that fibrils, which may be the primordial fibres of certain parts, are formed in a few minutes by the simple act of coagulation in fibrine.

"Mr. Gerber (Gen. Anat. figs. 16—18.) has delineated what he terms the first, second, and complete stages of *fibrillation* in the progress of organisation in the fibrine composing coagulable lymph; but he does not say how much his drawings are magnified, though in some of them a very low power must have been employed. Others are sufficiently enlarged to show the cells from which he says the fibres are formed; and this is precisely the point in which my observations are at issue with the views now generally entertained concerning the origin of fibres."

"All the organic tissues," says Dr. Schevann, "however different they may be, have one common principle of development as their basis—viz, the formation of cells; that is to say, nature never unites molecules immediately into a fibre, a tube, and so forth; but she always in the first instance forms a round cell, or changes, when it is requisite, the cells into various primary tissues as they present themselves in the adult state." (Wagner's Physiology by Willis, p. 222).

How is the origin of the fibrils, which I have depicted in so many varieties of fibrine, to be reconciled with this doctrine?—and what is the proof that these fibrils may not be the primordial fibres of animal textures? I could never see any satisfactory evidence that the fibrils of fibrine are changed cells; and, indeed, in many cases, the fibrils are formed so quickly after coagulation, that their production according to the views of the eminent physiologist just quoted would hardly seem possible. Nor have I been able to see that these fibrils arise from the interior of the blood discs, like certain fibres delineated in the last ingenious researches of Dr. Barry.—*From Mr. Gulliver's Contributions to Minute Anatomy, Lond and Edinb. Philos. Magazine, October, 1842.*

RETROSPECT OF THE MEDICAL SCIENCES.

PURPURA URTICANS.

Dr. Todd, of King's College, has recorded the history of a case of this rare disease occurring in the person of a policeman, a strong muscular man, who was admitted into the hospital under his care, in the month of October of last year. The man was of temperate habits, and attributed his illness to the harassing nature of his employment. During the previous summer he had had several attacks of diarrhoea. He was seized on the 15th of the month, a week before he placed himself under Dr. Todd's care, with stiffness in the legs, which was soon followed by swelling and pain of the joints, and an eruption of red spots; for this he was bled to a small amount by a medical man, and had purgative pills containing mercury. The complaint extended on the 19th to the elbows; the day after the throat became sore, and the night before he was admitted his eyelids and face began to swell, the œdema then affecting the face, scalp, trunk, and extremities.

The most remarkable phenomenon this man presented was the occurrence of an immense number of reddish or livid spots on the skin. These were found upon the forehead, the scalp, the chin, the upper and lower extremities. They were raised above the surrounding skin, like the wheals of urticaria; they were circular, very variable in size, some very small, others as large as a shilling, most of them distinct, but some confluent. The greater number of these spots were red or livid, from hæmorrhage having evidently taken place into the chorion; these which had only just appeared were whitish, but they soon became red, and the seat of a sanguineous effusion. The largest spots were on the scalp. The eyelids were exceedingly swollen, so that they could not be opened, and were livid from effused blood. A similar appearance presented itself around a blister that had been applied to the throat, and on the prominence of each shoulder; the margins of these red patches were raised above the surrounding skin, like the edges of the smaller spots. There were not any evidences of epistaxis, hæmoptysis, nor of bleeding from the gastro-intestinal mucous membrane; consequently there did not exist an hæmorrhagic diathesis. The poor fellow was laboring at the time under profuse mercurial salivation, with deep sloughing ulcers affecting the region of the tonsils and the arch of the palate, produced by the mercury that had been given to him in the aperient pills. The functions appeared to be all natural. Dr. Todd at first gave him an anodyne to procure rest, of which he seemed much in need, and then administered quinine, with acids, under the influence of which, combined with nourishing diet, the man gradually improved, and was discharged cured, early in December.

Dr. Todd observes, with respect to this case, that a leading feature of the disease was the occurrence of an eruption, presenting the characters of that of nettle-rash, fleeting and changeable like it, attacking different parts of the body, without any regular order or succession, but with, as so often occurs in cutaneous affections, a certain disposition to a symmetrical arrangement. To this was superadded a disposition

to hæmorrhage, limited strictly to the skin, with the exception of some spots which formed on the inside of the lower lip, and on the side of the uvula. The occurrence of the hæmorrhage Dr. Todd attributes to the presence of cuticular hyperæmia, from the nettle-rash occurring in a constitution previously enfeebled by considerable exertion, in which, consequently, the nutritive processes must be impaired, so that a rupture of some of the minute overloaded capillaries may take place. That this explanation is the most probable, he says, is abundantly evident from the following considerations:—1, The spots of urticaria always preceded the hæmorrhage which appeared in the centre of each wheal as soon as it reached its acme, and gradually extended through it; 2, the hæmorrhagic disposition in the skin was manifested only when some irritation was excited in it, either that of the urticaria, or some local irritant as a blister, for the surface to which the blister was applied exhibited a uniform black color, owing to the extravasation into the areolar texture of the chorion; 3, the absence of hæmorrhages from other surfaces and organs than the skin (although it did not prove that there was not a hæmorrhagic diathesis), yet showed that some change in the quantity of the blood in the vessels, or in the state of tone of their walls, was necessary to give rise to the hæmorrhage in the skin. Had the capillary system of the internal integument been similarly irritated, we should, doubtless, have found hæmorrhages taking place from the mucous membrane.—*Dublin Journ. Med. Sci.*, Sept., 1842.

FRACTURE OF THE CLAVICLE WITHOUT DISPLACEMENT.

In some cases of fracture of the clavicle occurring about the middle of the bone in young subjects, displacement of the fragments does not immediately take place, thus giving rise to a risk of an error in diagnosis, by which the ultimate probability of a cure is diminished. A lad, seventeen years of age, was recently admitted into the Hôtel-Dieu, under the care of M. Blandin, having, a few days previously, fallen upon one of his comrades while playing with him, when he instantly experienced pain, and a cracking sensation about the middle of the left clavicle, where there soon formed a tumor, which, increasing, induced him to enter the hospital. On examination, the swelling was found to occupy the middle of the clavicle; it was about as large as half a hen's egg, ovoid in shape, well circumscribed, colorless, and hard, but sensible to pressure. There was not any deformity of the shoulder, nor any abnormal modification of the axis of the bone, to indicate the existence of a fracture, and although the different movements of the arm caused pain in the shoulder, yet they could be made without much difficulty.

The symptoms in this case would lead to the belief that it was a case of simple periostitis, caused by external violence; but M. Blandin at once decided that there existed a fracture of the bone, having seen a similar case previously at the hospital Beaujon, where the tumor was treated as traumatic periostitis, the patient merely carrying his arm in a sling, until, by a sudden movement of the limb, displacement of the fragments was produced, and clearly demonstrated

the existence of a fracture. A second case occurring soon afterwards, M. Blandin profited by the experience gained from the preceding, and by moving the fragments of the broken clavicle on each other, obtained motion and crepitus. Still these indications were not so clear that M. Marjolin could diagnose a fracture; he was of opinion that the case was one of exostosis, probably syphilitic, and the crepitus he believed depended on an erosion of the osseous surface. In consequence, the patient was left to himself, until a movement of the arm gave proof of the fracture by the displacement of the broken portions of the bone.

Two other cases occurring in young subjects have been admitted since into the Hôtel-Dieu under the care of M. Blandin, one of whom was purposely left without surgical assistance, while Desault's bandage was applied to the other. The former soon showed evidences of consecutive displacement; the latter was cured without any deformity following.

The surgeon may diagnose a fracture, without displacement, of the middle portion of the clavicle, when a circumscribed tumor forms in that part in young subjects, consecutive on a fall on the shoulder, and motion of the fragments with crepitus can be detected, there not being any syphilitic taint in the constitution.

M. Blandin considers the elasticity of the periosteum, and the cartilaginous layer covering the bone in young subjects, as the cause of the broken portions of the bone not separating from each other until after a fresh action on the part overcomes the resistance offered by the fibrous envelope. The five patients who came under his notice with this accident were all under twenty years of age.—*Journ. de Med. et Chir. Prat.*, July, 1842.

COMPLETE ANCHYLOSIS OF THE KNEE-JOINT CURED BY AN OPERATION.

Cases of partial ankylosis of joints are generally admitted to be within the pale of surgery, but it has been shown by Dr. Barton, and subsequently by Dr. Gibson, of Philadelphia, that even in those cases where the structure of the joint is completely disorganised, and firm osseous union has taken place between the ends of the bones, so that they constitute one continuous shaft with perfect immobility, the surgeon may be able to remove the deformity and restore the injured limb to active service. Dr. Barton published his first case in the "North American Medical and Surgical Journal" for 1827. The operation was performed on a sailor, whose hip-joint was perfectly ankylosed, and the limb so situated as to overlap the other. There was, therefore, the twofold indication to correct the malposition of the limb, and to form a new joint. The thigh-bone was accordingly divided with a saw through the great trochanter, and a part of the neck. This having been done, the limb was readily straightened; and bony union having been prevented by daily movement of the limb, ligamentous attachments were formed, and an artificial joint resulted. After the lapse of sixty days, the patient stood erect on his feet, with both heels alike touching the floor, and in a short time possessed perfect use of the new joint.

About ten years afterwards Dr. Barton extended the principle of the operation to ankylosis of the

knee-joint, occurring in the person of a physician. The case was published in the February number of the "American Journal of the Medical Sciences," for 1838. A somewhat similar instance of ankylosis of the knee, resulting from a wound of the joint with an axe, having been placed under Dr. Gibson's care, in the Philadelphia Hospital, he decided upon operating, not with the double view of forming a false joint and extending the limb, but simply to correct its malposition, the leg being so flexed as to form an angle much less than a right angle with the thigh. A careful examination satisfied Dr. Gibson that the parts belonging to the joints were all destroyed—ligaments, cartilages, and the synovial membranes—and that it was a case of complete ankylosis.

The following were the steps of the operation:—Two incisions were made, the first extending from the outer to the inner side of the limb, and passing immediately above the patella; the second commencing on the outer side, two and a half inches above the first, and meeting it at an acute angle on the inner side. These incisions penetrated to the bone, engaging the integuments, the tendon of the extensor muscles, and some of their fibres. The soft parts included between the incisions being dissected off, and turned back, the bone was exposed to view. A portion of the femur, of a wedge shape, was then removed with the saw, having a base upwards of two inches and a half anteriorly, and reaching to within a few lines of the posterior surface of the bone. The operation was then concluded by inclining the leg backwards, which caused that portion of the bone's diameter, undivided by the saw, readily to yield, and the solution of continuity to be made complete. This method of accomplishing the separation of the bone was regarded as an important step in the operation, inasmuch as it guarded the popliteal artery against wounds from the saw; and the dovetailed edges of the opposed surfaces were influential in fixing the extremities of the bones, until the asperities of the surfaces were removed by absorption, or by the formation of new matter. No blood-vessels were divided requiring the ligature or compression. The operation was completed in a few minutes, and the flap, being returned to its place, and secured by the interrupted suture, light dressings were applied. The patient was put to bed, lying on his back, with the limb supported upon a double-inclined plane, having an angle correspondent to that of the knee before the operation. As great care was necessary to provide against pressure upon the popliteal vessels, the limb reposed upon two bran bags, which were fastened to the edges of the plane, so fashioned that its angularity could be varied without being removed from beneath the leg, as its extension might require. The vacancy between the bags was carefully supplied with cotton. Very slight hæmorrhage followed, which, proceeding from the division of one of the articular arteries, stopped spontaneously in a short time; and except for a slight oozing, which continued for two days, there was not any sign of hæmorrhage afterwards.

This operation was performed on the 17th of November, after which everything went on well; the patient did not have a bad symptom; the leg gradually extended itself, and by the 5th of December the straightening of the limb was sufficient to justify the

removal of the splint, for which a simple box, lined with carded cotton, was substituted. The comparative length of the two limbs being then taken, gave the sound one an excess of an inch and a half. The supuration, which commenced on the 24th, became very free after this change, inducing some tumefaction of the knee and irritative fever; in consequence, a more depending opening was made near the head of the fibula, to allow of its more ready exit; and a sinus having formed in the thigh, a seton was passed, but withdrawn a week afterwards, its object having been effected. By the 12th of January the bones were found to be firmly united, and by the 25th the patient could walk with the aid of crutches. The report of the 1st of May states that, for the last two months, he had walked about continually without crutch or stick, and has lately walked three or four miles without inconvenience. The leg is rather shortened.—*Amer. Journ. Med. Sci.*, July, 1842.

MECHANISM OF HÆMORRHAGE.

An opinion prevails, says Dr. Todd, sanctioned by eminent authority, that hæmorrhage may occur in two ways; first, by a sweating of the blood through the coats of the vessel without rupture, and secondly, by rupture of the vessels. The former opinion, which Dr. Todd is disposed to controvert, is affirmed, because in certain cases no breach of continuity, no ruptured vessel, can be found even after the most careful examination on the hæmorrhagic surface. But in order that red blood may transude through the walls of the capillaries, all its constituents must find a ready passage: now the red particles measure from 1-4500th to 1-2000th of an inch; they are compressible and elastic, and, supposing they could be compressed to one half of the smaller of these dimensions, then must there be pores in the parietes of the capillaries large enough to transmit particles measuring 1-9000th of an inch, which pores, if they existed, would be visible under the microscope, and if they were present in great numbers, the parietes of the vessels would have a cribriform appearance. As this state does not obtain, Dr. Todd is led to deny the possibility of an escape of blood in an unaltered state through the walls of the capillaries, and to affirm that all the ordinary hæmorrhages take place by rupture of the blood-vessels.

It has been said that in scurvy and purpura the coloring matter is dissolved in the liquor sanguinis, an opinion in which, from a careful examination of the blood drawn from a patient laboring under purpura, Dr. Todd did not coincide. In that instance, at least, the coloring matter was certainly not in a state of solution. The diseased condition of the blood consisted in an imperfection of the blood corpuscles. Some of these were found to be distinct and large, most of them measuring from 1-2000th to 1-3000th of an inch; but a vast number of much smaller, roundish, or irregular bodies existed, some of which seemed like shrivelled corpuscles, but the great majority resembled little aggregates of granules, adherent to each other, with small particles of coloring matter intermixed, forming bodies ranging between 1-4000th and 1-5000th of an inch in diameter. These bodies were much more numerous than the blood corpuscles, and Dr. Todd thinks it not unlikely that they might be corpuscles in an imperfect state of development, the

imperfection of the formative process being due to some alteration in the chemical and vital properties of the blood.—*Dublin Journ. Med. Sci.*, Sept. 1842.

DISLOCATION OF THE FOREARM BACKWARDS.

M. Roux states, with respect to these dislocations, that there are certain points of great importance, more especially as relate to the modifications effected by age, sex, and constitution, which have not been sufficiently attended to by authors. In July last a boy, thirteen years old, of a weakly constitution, fell on the right hand, the forearm being fully extended on the arm at the time. He immediately experienced severe pain in the elbow, which soon became the seat of great swelling. He was admitted into the hospital the next day, when M. Roux diagnosed a dislocation of the forearm backwards, which he reduced at once without difficulty.

A symptom, to which the surgeon drew attention, was, that, notwithstanding the luxation, the forearm was in a state of complete extension, while it is declared in almost all works on surgery, that marked flexion of the forearm is a constant sign of the dislocation backwards. This statement, Roux says, is an error, which has in many cases caused the nature of the injury to be misunderstood. This degree of flexion is to be expected, he adds, in cases of adults, because the inferior extremity of the humerus being thrust forwards, the biceps and brachialis are thrown into violent contraction by the pressure exerted on them. It is otherwise in women and children, and in all persons whose muscular system is but slightly developed, or the bones are not fully formed. The ligaments being soft, and the muscles wanting energy, the forearm may in such cases be in a state of complete extension, although the relation of the surfaces is changed.

The swelling, which rapidly supervenes on the displacement of the bones of the elbow, resulting generally from partial laceration of the muscles and ligaments, is another cause of error. To ascertain decidedly the diagnosis of this luxation, the reunion of three orders of signs is requisite:—1, projection forward of the lower end of the humerus; 2, projection of the olecranon above the transverse line of the tuberosities; and 3, a depression above the olecranon.—*Journ. de Med. et Chir. Prat.*, Sept. 1842.

POISONING BY CHERRY-LAUREL WATER.

According to the statement of Professor Gerhardt, who was called upon to report as to the cause of the death of a child which had died very soon after taking a small quantity of a medicine directed to be prepared as follows—120 scruples of distilled water of black cherries, 30 scruples of syrup of tolu, 1 scruple of myrrh, 1 scruple of calomel, and 3 drops of laudanum—a cherry-laurel water of exceeding potency had been substituted by the druggist for the water of the black cherries. On examining the bottle containing the medicine, as sent by the druggist, the experts were struck with the very powerful and even insupportable odor of bitter almonds which was immediately given forth. Three young rabbits were successively killed in three minutes respectively by a coffeespoonful of the mixture, the principal symptoms being convulsions and tetanic spasms. From these facts it was probable that a large quantity of prussic acid was

present in the mixture. As this poison exists in the distilled waters of both cherry-laurel and the black cherry, although but slightly in the latter, comparative experiments were made on rabbits, with mixtures prepared with these waters obtained from other shops, but without any injurious effect being produced. The medicine containing the black cherry water had neither the smell of prussic acid, nor did it produce any symptom of poisoning. A coffeespoonful of cherry-laurel water, from the shop of the druggist who was inculpated by the proceedings, was then given to a rabbit, which died in a few minutes in violent convulsions; the same experiment, repeated several times, was always attended with the same result. On this account, the probability that cherry-laurel water had been used was considered very great, and, indeed, the druggist did not deny the fact.

But then arises the question, why did the cherry-laurel water from one shop cause death in a few minutes, while from another it did not produce any symptoms of poisoning? The gentlemen engaged in the investigation report that this distilled water varies in its poisonous properties, according to the season in which it was prepared, and also according to the length of time it has been kept.—*Journal de Pharmacie du Midi*.

QUEEN'S HOSPITAL, BIRMINGHAM.

The medical officers of this institution have liberally paid over the sum of £503, fees from students, towards the support of the hospital.—*Morning paper*.

MR. OWEN.

Mr. Richard Owen, of the College of Surgeons, has, we understand, been honored with a "settlement" on the pension-list to the amount of £200 per annum.

DISMISSAL OF A CORONER.

Mr. Pasley, coroner for the county of Dublin, who had been convicted of cheating the rate-payers by issuing fraudulent certificates to a medical man, has been removed from his office by the Lord Chancellor of Ireland.

PROMOTIONS AND APPOINTMENTS.

NAVAL.

Assistant-surgeons—J. Boland, to the Volcano; W. Hammond, to the Resistance; H. R. Banks, to the Royal George; J. Bernard, to the Rhadamanthus.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, November 4, 1842.

H. Challinor, B. K. Johnson, J. Thompson, C. E. Prothero, W. Higgins, H. Marder, E. Jay, A. Ebsworth, R. B. Walcott, W. H. Hay, R. Jones.

BOOKS RECEIVED.

Manual of Diseases of the Skin, from the French of MM. Cazenave and Schedel, with Notes and Additions by Thomas H. Burgess, M.D. London: Renshaw, 1842. 8vo. pp. 320.

On the Preservation of the Health of Body and Mind. By Forbes Winslow. London: Renshaw, 1842. 8vo. pp. 202.

On Diseases which affect Corresponding Parts of the Body in a Symmetrical Manner. By William Budd, M.D. (From Medico-Chirurgical Transactions.)

Observations on the Admission of Pupils into the Wards of Bethlem Hospital, &c. By John Webster, M.D. Third edition. Churchill, 1842. pp. 62.

The Literary and Scientific Register and Almanack for 1843. By J. W. G. Gutch. London: Lumley, 1842.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

Dr. Hennen's communication, on the Mortality of the Children at the Royal Military Asylum, &c., shall appear in our next Number.

We have also to acknowledge the receipt of an interesting case of hydatids of the brain, by *Mr. Tanner*.

B.—We are not yet reduced to the necessity of inserting communications from quacks, whether professional or non-professional. The gentlemen who inhabit certain "squares" must, therefore, content themselves with the publicity which results from the insertion of their puffs in the "*Lancet*" and "*Medical Gazette*." It is really deplorable to see how unwilling men are to practice what they preach.

The requests of *Mr. Walker* and *Philo*, have been attended to.

We have received some letters relative to the transmission of the Journal, which have been submitted to the publisher.

Amicus.—We thank *Amicus* for his kindness, and shall be glad to receive the first part for perusal.

A. F.—We refer *A. F.* to our advertising columns. The Manual of M. Cazenave is the best elementary work that the practitioner can possess. There are more elaborate treatises on diseases of the skin, but the one we allude to is the most practical and convenient one with which we are acquainted.

Z.—Our correspondent's prophecy has been fulfilled; but the poor attempt to revive the *Bat's Club* can at the present day only excite contempt. The time is gone by since a falling journal could be propped up by calumny and impotent sarcasm.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET,
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COURSE OF CLINICAL LECTURES, DELIVERED AT THE MIDDLESEX HOSPITAL. BY DR. WATSON.

Lecture IV.—November 5, 1842.

GENTLEMEN,—There have been twenty-four patients admitted since our last meeting here, twelve males and twelve females. The new cases presented classify themselves thus :—There are two of anasarca, Edward Saunders and Mary Ryan, both affected with renal dropsy, not, however, presenting any particular feature demanding more than ordinary notice. One of them illustrates very well the remark I made in a former lecture, that in our examination of patients we must not depend on the relation given by themselves, but must mainly rely on our own observation. I allude to the case of Mary Ryan, an Irishwoman, from whose verbal statement nothing whatever could be learned. There are three cases of phthisis—two certain, John Deane and Thomas Pine; the third, that of William Hooker, is one of strongly suspected phthisis, but the diagnosis of which I have not yet fully confirmed. Two cases of simple fever, one the diagnosis of which is quite clear; if the other be not fever, I hardly know, from present appearances, what it is; but it is more than probable that a day or two will enable us to diagnosticate with perfect accuracy. Those two are Samuel Robins and Mary Anne Geary. Five cases of rheumatism, or affections immediately connected with it—William Balding, John Little, E. Moore, all decided rheumatism; Charlotte Panoeh, whose affection is a sequela of rheumatism; and, perhaps, similar is the case of Joseph Burnbrock. One of erysipelas, Michael Sheen, who was before in hospital, and has been now readmitted. One of pneumonia, J. Ball. One of cynanche tonsillar, Mary Wake, a rather interesting case, on which I shall have to make a few observations. One of measles, Henry Smith. One of scarlet fever, Fanny Barr. One of perioritis, Mary Billington, a rather remarkable case of inflammation and thickening of the periosteum. Two of disorders of menstruation, Mary Surnam, whose case is one of emansio mensium, and Caroline Churchill, a case of total absence of menstruation. One very interesting case of abdominal tumor, Mary Hill. One of hysteria, Mary Harding. One which I hardly know how as yet to name; it is a case of frequent vomiting, from a cause not sufficiently ascertained; it is that of Charlotte Elmore; and one of renal irritation, or affection of the kidney.

Taking the twenty-four cases which I have enumerated, with the patients previously in the house, we have certainly a sufficient number to afford us

very interesting and very instructive study. Perhaps the first thing calculated to strike us, on viewing the present state of our wards, is the number of phthisical patients. Among the new patients, those admitted since Tuesday last, we find three phthisical cases; two, at least, are certainly so, and that the third is one, I have very little doubt. I sent out last week two decided cases; I allude to John Batty, aged forty-six, and Eliza Taylor, aged fifty-eight. Of remanets, or patients who had been previously in hospital, and still remain in the house, there are three of phthisis—namely, James Reynolds, aged sixty-two; John Self, aged fifty-six; and, most probably, John Mitchell, aged near sixty. Yet these are cases we are forbidden, by the rules of the hospital, to admit or retain; and they are excluded on this ground, that being incurable and capable of receiving little relief in hospital, they should not be allowed to occupy the places of others, for whom medical attention may effect more in a house where the number of beds, as here, is necessarily limited. If, then, we discover to our full assurance, on examination in the entering room, that a patient is afflicted with confirmed phthisis, we, in compliance with the regulations, reject him. And if, after admission, and upon testing the ailment by all proper means, we discover that the person at first admitted is actually afflicted with this disease, we dismiss him at the earliest suitable opportunity. Notwithstanding all this care, we find our wards constantly full of consumptive patients. On going over the case-book, and comparing with the number of deaths altogether the number of deaths from phthisis or phthisical affections, I find they bear the relation of one to two, or that one out of every three deaths of patients under my care is death from this fearful malady.

It is well worthy also of your consideration to examine the different ages of those patients. In a former lecture I alluded to an error prevalent among non-medical, and especially among uneducated persons, that phthisis was confined to the earlier periods of life, and that if an individual attained to a certain age, he was then safe from its assaults and its ruinous effects. The experience of every day sadly refutes this error, and shows you that no age or condition is security against this insidious and merciless foe. Though, unhappily, it has been found, and probably will continue to be incurable, we should not the less, on that account, so direct our studies and energies as best to apply the means at our disposal for affording temporary relief, and, if possible, protracting to the furthest the result, which, however long delayed, must be inevitable. When you, Gentlemen, come to practise for yourselves, a vast number of phthisical cases will certainly present themselves, and make serious demands on your knowledge and skill. Though in almost every case your highest hope, and the re-

sult of your most judicious exertions, will be but a delay of the final surrender—a putting off of the certain consequence—you ought at least to be well prepared to alleviate the sufferings of your patient, and to adopt the best mode of treatment for his particular species of the disease. You will remember that its prominent and most distressing symptoms differ much in different persons—that it is not a mere lung ailment, but a constitutional complaint, the distress of which falls most frequently on the lungs, but not always of necessity so—that it falls now on one organ, now on another. As regards a disease so insidious, so frequent, so fatal, and in its prominent symptoms so various, I can deem no apology necessary for soliciting your anxious attention to the leading and characteristic features of every case that may present itself; nor shall I consider any opportunity to be neglected which affords occasion for dwelling on the distinctive symptoms of each variety, and the particular treatment which those symptoms indicate as the best to be adopted.

I shall now direct a few observations to the several cases of this disorder which at present are, or most recently have been, under my treatment; and, as in other cases, I shall observe the order I have laid down, first referring to those which have been withdrawn from my care, either by a fatal termination, or by removal from the house, whether under favorable or unfavorable circumstances; then to the remanets, those cases which had been in the house at the time of our last meeting, and still continue with us, and lastly, to the cases newly admitted. I have mentioned, that during the past week I sent out two patients laboring under confirmed phthisis, both persons rather of advanced years—John Batty and Eliza Taylor. In the case of Batty, the leading symptoms were hoarseness and occasional dyspnoea, with wheezing respiration, and tenderness of the larynx; the other symptoms were a wasting of the body, repeated sweats, frequent and feeble pulse, also dulness on percussion, and feebleness of the respiratory sound beneath the clavicles. All these symptoms clearly bespeak phthisis. A part of the history of this man's case was, that he had had syphilis once or twice. The previous occurrence of syphilis had led some one, whose aid he had sought, to salivate him; and it was a natural belief that the laryngeal organs were involved in the syphilitic affection. I say, it was a natural mistake to salivate, with the view of relieving the tenderness of the larynx! The salivation did no good as regarded that symptom (and thus, as in this instance, the effect of a remedy becomes diagnostic), but probably it did harm to his general health. Yet it was a natural mistake, and only shows how very careful we should be in exploring every possible symptom that may inform us of the true character and cause of disease. I found in this case much relief afforded to the respiratory organs by the inhalation of the vapor of creasote, and I think it well worth while to mention this, as it may in other instances be found serviceable in permanent inflammation of the larynx. The mode in which I had it used was by having the creasote suspended in mucilage at a high temperature.

The other case, now removed from the hospital, was, as I have said, that of Elizabeth Taylor, another patient rather advanced in life, she being fifty years,

or thereabout. In her case there were no symptoms particularly prominent, but those which manifested themselves were amply diagnostic. She had a cough, attended with expectoration of globular sputa, indicating former hæmoptysis. She had wasted away fast—had perspirations, diarrhoea, and frequent pulse. It scarcely wanted any proof by auscultation to establish the diagnosis; that, however, came, and fully confirmed the conclusion previously arrived at. There was gurgling and pectoriloquy in the right subclavicular space.

Of the cases now in the house:—James Reynolds is aged sixty-two. His most prominent and distressing symptom is hæmoptysis. This does not necessarily imply that the disease is phthisis, for it is sometimes a vicarious effort, as in cases of suspended catamenia. But in his case other symptoms came to our information. He had not wasted much, and had no perspirations. But on ausculting, you find hollow respiration, and large crepitation or gurgling in the left subclavicular space. Thinking to check the expectoration of blood, I administered the usually prescribed remedy—gallic acid. It was attended with very little effect. I do not know that you can take the failure of this remedy in his case as any proof of its inefficacy for the purpose to which it is applied, for a much more powerful preventive of this discharge of blood—acetate of lead—was also tried, and with equally little effect.

John Self is aged fifty-six. His symptoms are shortness of breath, a cough, attended with expectoration, but not of blood, and the most distressing symptom, diarrhoea. This is so severe that the man is himself confident that, if his stomach and bowels could once be set right, he would be quite well. By ausculting, you find tubular breathing distinctly, in and out, in both subclavicular spaces; there is a slight gurgling in the left space; the voice is very resonant in the right. No doubt can be entertained that the case is one of consumption.

John Mitchell is nearly sixty years old. He is affected with pneumonia; we find imperfect breathing in the upper part of the other lung, and in the lower part of the same lung what is termed puerile respiration, which is a pretty certain indication of the disease.

Of the new admissions, the first is John Dean, a man much younger than any of those before mentioned; he is twenty-six years old, and his symptoms are definite; he is very thin and pale, and speaks of having had a severe cough for about six weeks before his admission; his pulse is feeble and reaching to 100; much expectoration attends the cough. His other symptoms are—wasting; great debility, daily increasing; shortness of breathing; he has had perspirations before entering the hospital, and his bowels are confined. On auscultation I found his breathing tubular, and especially so on expiration, distinctly heard in both suprascapular fossæ. I remark particularly that you detect the altered respiratory sound on expiration; for you ought not, under ordinary circumstances, to hear the expiration—the departure of the air from the lung—at all as distinctly as the entrance of it; while in this man you heard the expiratory murmur quite as distinctly as the inspiratory in the left suprascapular fossa. I have found in ausculting that, when you fail

to detect any symptom of tubular breathing in the usual region, beneath the clavicles, you succeed in detecting it by applying the instrument just below the scapula; in this case I found it in the lower part of the left scapular region, and on the man's coughing there was a sound heard, for which I can find no more expressive name than a *squash*.

Thomas Pine is another patient not far advanced in years; he is twenty-six years old, and has been a railroad labourer. He has a hard, noisy, and violent cough, coming on in paroxysms of some considerable duration; this cough is accompanied by expectoration of much mucus in puriform masses, and was once, he states, attended by expectoration of blood for a period of seven or eight weeks. The other symptoms in his case are—rapid wasting; a frequent pulse, reaching to 108; and much night sweating, which he was not used to. He had been an intemperate man, and, of course, from his employment, has been much exposed to the inclemencies and vicissitudes of the weather. Auscultation, almost unnecessary in this case, sets its seal upon the character of the disease. In the left sub-clavicular space I found a slight gurgling; respiration is imperfect, and percussion dull in the upper part of both lungs.

The other man to whom I have alluded as strongly suspected of laboring under the same malady, is Wm. Hooker, aged fifty. He suffers from a cough and pain in the chest, as also from hæmoptysis; his pulse is quiet, and as yet I have not ascertained any disorder of the respiratory organs discoverable by the ear, but the diagnosis in his case is as yet incomplete.

From the succinct catalogue of cases which I have now run over, as well as from those to which, on former occasions, I have had to direct your attention, you see, Gentlemen, what a great variety exists in the symptoms of this too fatal and too common disease, and you also observe a corresponding variety in the distress and suffering to which its victims are subjected. Some, with little or no suffering, fade away—gliding, as it were, insensibly out of existence; some are harassed by cough, others by sweats, many by two or more of those distressing accompaniments; and most are afflicted by cruelly harassing diarrhæa, the inflammation of the mucous membrane of the intestines causing constant demands for evacuation, and rendering necessary frequent rising from the bed, when doing so is extremely wearisome and painful. Some are visited by another most distressing symptom, bed-sores, of which I have seen very many most painful instances, in which the bones were completely denuded, and from the number and position of the sores rest was almost impossible, and existence became a torture.

Varied as are the symptoms, and the modes, and degrees, of distress and suffering, equally varied are the periods of duration. In some instances the disease speedily accomplishes its work; its assault is violent, and its progress rapid, and thus patients are said most expressively to have galloping consumption; of such I have known some cut off, within nine months, from the first development of external symptoms. In other instances the patients last very long, the progress of the disease is extended over a long series of years, during which the decay is gradual, but the symptoms are either continuous, or not infrequently interrupted by intervals of apparent good, or improved health.

Dr. Latham, in his little book upon subjects of clinical medicine, treats of phthisis, and describes very well those two varieties in the chronic form; to his observations I commend your attention. You will assuredly find in your future practice, if you have any patients at all, that you will have many phthisical patients; you should, therefore, be fully prepared for those varieties of the disease—prepared at once to discriminate between them, and to adopt in each variety the treatment fitted for it.

There are two questions which you are sure to be asked, when called in to phthisical patients, questions that will be anxiously asked by their relatives and friends, and answers to which you will be expected, and indeed you must immediately give. Over those two questions you should have previously thought much, and you should feel yourself able to give answers with readiness and proper confidence; the first regards the diet; the second the place of abode. In respect to the diet, there may be two opposite faults—you may direct the patient to be over-fed, or, on the contrary, you may direct under-feeding. Now to the question regarding the diet you must not always give one and the same answer; that regimen which would be proper and requisite for one patient would be extremely improper and highly injurious for another. In one case the system must be nourished, the attenuated frame upheld by generous living; in another case, where the disposition to inflammation is marked, anything exciting must be carefully avoided. I may condense the observations on this point, which I shall have repeated opportunities to impress on you, into these general hints:—In chronic cases of this disease your patient must be sustained, cheered, warmed—he must be thoroughly well nourished; in acute cases, on the contrary, a low diet must be adopted, as anything of an exciting or of a rich nature has a tendency to involve the yet healthy part of the lung.

As regards the place of abode, I have long been of opinion that, in very many instances, too much has been expected from residence abroad—too much importance has been attached to sending patients to other climates. If you find from accurate search and examination that the lung has become tubercular, that it has been so seized on by disease as to forbid the hope of arresting the progress of the malady, much less effecting the release of the captive organ, it will be worse than useless—it will be cruel—to send the patient away from home, where, and where only, those attentions of most avail in alleviating anguish, and soothing the pillow of sickness, can be found in full perfection, where only pleasing and kindly associations lend their aid to render comfortable the sufferer's progress to the grave. If, on the other hand, the disease be only threatening—if there have broken forth no decisive proofs of its victory over the constitution—or if, being yet inceptive, a hope may be fairly entertained that a milder climate may assist in retarding the march of decay—then you may properly recommend a warmer sky and a less trying air.

Before turning to any other portion of this subject, I would again impress on your attention the necessity of discriminating the several varieties of this disease; in particular, you will remember that its chronic forms are twofold. In one, the patient will seem at times to have recovered—the distressing symptoms will

have disappeared, and remain, as it were, in abeyance, for a considerable time; the patient himself, feeling his great pain or suffering relieved, will think himself recovered. This probably occurs when, by excessive effort, the tubercular matter has been almost all ejected, and during the interval required for its regrowth, or reproduction, the general health appears improved. But you must not be deceived by those appearances—the suffering is less, nay it may have ceased, but beneath the fatal causes are at work. Again, the period of suffering returns—again, again, and again the interval of seeming health returns, to be followed of a certainty by periods of great peril and distress. In the other chronic form there is a continual state of impaired health—not perhaps attended with much actual suffering—but however slow and silent the progress of the malady, it is sure; the tubercles increase in number and in size year after year, until finally the system breaks down beneath the uninterrupted pressure of disease.

I would now throw out a few hints as to the mode of treatment adapted to the relief of the several prominent symptoms, that you may be able to alleviate suffering, which you are powerless utterly to remove—that you may render less uncomfortable the life you cannot save. A very large number, indeed the majority of phthisical patients, suffer from cough. For this you may procure relief by hydrocyanic acid; and should you find it obstinate, you will probably find it yield at length to opium. Some patients are very much distressed and weakened by hectic fever and frequent perspirations, which are generally most distressing at night. To relieve those recourse is had to acids, such as sulphuric acid. According to circumstances the acids must be guarded or qualified by the use of opium. Diluted sulphuric acid I have found serviceable; but sometimes we cannot administer it in that form, in consequence of the state of the bowels. In the case of the patient, Self, whose name I have before mentioned, I had to administer a preparation with paragoric. Kino has been found very effective in some instances. Lead is recommended by many, though I have not been much in the habit of using it. Sponging with vinegar and water is also useful. For the relief of diarrhoea the remedies are kino, ratanhia, and logwood—when all those failed in the case of Self, I at last tried opium, and found it effective; the form of its exhibition was opiate enemata. The relief of the bed-sores is probably more difficult. Plasters you will find the most effective. Many use spirituous lotions, and certainly if you discover symptoms of their approach in time—if you see the skin becoming red and inflammatory—you may prevent the breaking forth of the sores by a lotion of brandy. But when you find the sores existing, the flesh ulcerated and sloughed, you must use plasters, and in all cases, when procurable, you must place your patient on Arnott's bed. With these few suggestions I must close this day's remarks on phthisis.

With regard to the other cases to which I would refer in this running commentary, I will now take one or two that are likely soon to be over. I have named Mary Billington, as a patient afflicted with periostitis. She entered the hospital with pains in her different limbs and joints, and at first I thought she was laboring under rheumatism; but a little farther examina-

tion showed me it was not a case of simple rheumatism. The pains were of ten months' duration; there was no swelling of the joints; no morbid fever nor sweating; she never had had rheumatic fever; the pains, she said, were always worse when she was warm, and particularly severe at night. That is sometimes the case in rheumatism. But I found the left tibia towards the centre of its shaft swollen, painful, and tender; the left ulna was painful, and there was considerable tenderness on the left of the sternum. I concluded the case was periostitis, and it seemed syphilitic; but the woman affirmed that she never had suffered from the venereal disease. I have found in this case, as in every similar one, the iodide of potassium most efficacious, on being applied to the nodes. I have never seen it fail to cure those symptoms, and it appears to be as positive a specific against them as bark is in ague, or sulphur in itch. You will watch this case, and observe its progress carefully. I have seen the woman but once since the treatment I refer to, but even then the good effect of the application was manifest—the node was evidently less. I need not tell you that the iodide of potassium, like mercury, often produces an affection of the eyes and nose, and particularly of the Schneiderian membrane, and that it even excites catarrh. I have found these effects from its use in private practice. But you have seen so many times the same results here, that it is unnecessary to dwell upon them. In the cases to which I have applied it, it has sometimes caused pain in the frontal sinuses, but which did not show any sign of descending to the bronchi, and consequently I have not been in any way alarmed.

The last case to which I can this day advert is that of Mary Wake, whose malady is cyananche tonsillar, which had run its course in a great measure. When she entered the hospital she had been laboring for a fortnight with a swelling of the left tonsil, soreness of the throat, especially on the left side, difficult deglutition, and diffused swelling of the parotid. This morning I find she was seized with difficulty of breathing, and she is now lying in the ward breathing with great difficulty. There probably is some abscess which causes this new symptom. I have directed an emetic to be given her. It is a case of some peril, and well worth your closely watching. Besides the symptoms I have already mentioned, she has great pain in one side of her head, for which I have caused muriate of ammoniac to be used. It is well worth knowing that muriate of ammonia is most serviceable in this form of hemicrania. Of the remedial properties of sal ammonia very little is known, at least very little was so until lately; its efficacy and the mode of administering it were first made known to me by an old apothecary of this city, who had, in innumerable cases, found it a sovereign cure. It should be administered in doses of half a drachm, or a scruple, and you will find that where persons complain of pain in the jaw and the whole side of the head, the pain freely yields to this dose of muriate of ammonia. I may add that in Germany this medicine is used in many cases where we use mercury, and for the same purposes, as in hepatic affections, and that it produces the required results without any of the inconveniences attending the use of mercury. The other cases I must postpone until next Saturday.

COURSE
OF
LECTURES ON ORGANIC CHEMISTRY
AS APPLIED TO
MANUFACTURES AND AGRICULTURE.

By M. PAYEN, Member of the Institute.

LECTURE V.

Analysis of Manure—Table Showing the Relative Value of each Species—Particular Notice of Certain kinds of Manure.

GENTLEMEN,—In my last lecture I explained to you the manner in which you should conduct the analysis of any particular animal substance, and especially of a manure, and I pointed out how you were to determine the exact quantity of nitrogen contained in it; but I then alluded to the elementary composition of the material, and founded my remarks on the supposition that it was necessary to ascertain the exact proportions of carbon, hydrogen, oxygen, and nitrogen. This explains why I recommended you to employ a tube for the chloride of calcium, and the combustion tube of Liebig. However, as our chief object is to ascertain simply the quantity of nitrogen contained in any manure, we may dispense with these instruments and follow the following method of analysis:—

You take a strong glass tube and close it, by heat, at one end; the next step is to dry it, and this may be done by rinsing the tube with a small quantity of warm deutoxide of copper; when any moisture which may be contained in the tube is thus removed, you introduce a small quantity of the bicarbonate of soda; in addition to this you add a layer of deutoxide of copper, and then about six grains of the manure, well dried and mixed with a little deutoxide of copper. Above this mixture you place some copper shavings, perfectly free from oxide, then a fresh layer of oxide of copper, and lastly, you fill the tube with metallic copper. This done, the tube is surrounded with copper leaf, supported by twisting iron wire round it, taking care to leave the part of the tube which contains the bicarbonate of soda free. The combustion tube is then placed in a long furnace and made to communicate at one end with a double branched tube, one branch of which communicates with a vessel containing mercury, and the other with one of Guy-Lussac's small air-pumps. When this tube has been fixed on the combustion tube the air-pump is worked, for the purpose of trying if all the joints are true. When this is ascertained, a receiver, two-thirds full of mercury, is placed erect in the mercury bath and above the extremity of the receiving tube, its upper third being filled with a concentrated solution of potass. The furnace is now filled with charcoal, commencing opposite the part of the tube which contains the deutoxide of copper (the tube containing the soda is to be heated subsequently) and under the influence of heat the organic substance undergoes decomposition; its oxygen and carbon form carbonic acid, the hydrogen unites with oxygen to form water, and passes, with the nitrogen, under the form of vapor, into the receiver containing mercury; the carbonic acid is taken up by the potass; the watery vapor is condensed while the insoluble nitrogen passes to the upper part of the receiver and displaces the fluid. When the operation is terminated, which is known by the gas

ceasing to be disengaged, the extremity of the tube containing the bicarbonate of soda is then heated. The bicarbonate is thus decomposed and emits a considerable quantity of carbonic acid gas, which sweeps along the combustion tube, and carries with it any gases which might have remained there. The above operation having been completed, the solution of potass is carefully shaken in the mercury bath, so as to saturate any carbonic acid which may have been mixed with the nitrogen. If we have any reason to fear that the saturation is not complete, a small piece of caustic potass may be introduced into the solution. The receiver is now removed from the mercury bath, placed in an earthen vessel full of water, and the mercury is removed and replaced by water; all this must be done with very great care. Finally, the gas which now occupies the upper part of the receiver, and is pure nitrogen, is transferred to a small graduated bell to ascertain its volume, &c. When we have obtained the volume we easily get the weight, according to the following formulæ:—

	Temp.	Pressure.	Weight.
1 quart of dried nitrogen	0°	0.76	1.259 grs.
1 (moist)	15°	0.77	1.188 „
1	15°	0.76	1.172 „
1	15°	0.75	1.156 „
1	15°	0.74	1.140 „

The following table exhibits a view of the equivalents of the substances commonly employed as manure:—

Substances.	Nitrog. per 1000.	Equi- valents.
Stable Manure	4.0	10000
Peas	17.9	2223
Millet	7.8	5128
Buck Wheat	4.8	8333
Lentil	10.1	3960
Oats	2.8	14285
Barley	2.3	17390
Rye	1.7	23529
Wheat	4.9	8160
Lower part (0.67) of the straw	4.1	9750
Upper part (0.33)	13.3	3000
Wheaten chaff	8.5	4700
Dried stalks of Jerusalem artichoke	3.7	10810
Top { Madia	5.7	7010
leaves { Beet	5.0	8000
of { Potato	5.5	7272
Carrot	8.5	4700
Field weeds	5.3	7547
Furze, leaves and stalk	12.2	3278
Autumn { Oak	11.7	2777
leaves of { Beech		
Poplar	5.3	7434
Acacia		
Pear-tree		
Heath	17.4	2290
Fucus digitatus	8.6	4650
„	9.5	4211
„ Sacchar. sic	13.8	2890
„	5.4	7400
Brewers' grains	45.1	880
Clover root	1.6	24800
Lupin seeds	34.9	1140
Grape husks	18.3	2185
Pulp of beet root (dry)	11.4	3500
„ (pressed)	3.8	10580
Oyster shells	3.2	12500
Burned sea weed	3.8	10526

Substances.		Nitrogen, per 1000.	Equi- valents.
Soot	{ Coal	13.5	2962
	{ Wood	11.5	3478
River mud		4.0	10000
Manure		5.1	7810
Picardy cinders		6.5	6150
Dried muscular flesh		130.4	306
Salt cod		67.0	597
"	{ washed and pressed	168.6	237
	{ Dry, soluble	121.8	328
Blood	{ Fluid	27.1	1474
	{ Coagulated and pressed	45.1	886
	{ Insoluble and dry	148.7	269
Feathers		153.4	260
Cow hair		137.8	290
Woollen rags		179.8	222
Beet root (worked)		0.9	41365
	{ Linseed	52.0	769
	{ Coleseed	49.2	813
Cakes of	{ Arachys hypogea	83.3	462
	{ Madia	50.6	790
	{ Croton	40.2	993
Pulp of potato		5.3	7600
Juice of potato		3.8	10638
Saw-dust	{ Acacia	2.9	67459
	{ Oak	5.4	13790
Solid excrement of cow		3.2	12500
"	" horse	5.5	7270
Urine	{ Cow	4.4	9090
	{ Horse	2.6	1530
Mixed Excre- ment	{ Cow	4.1	9750
	{ Horse	7.4	5400
	{ Pig	6.3	6240
	{ Sheep	11.1	3600
	{ Goat	21.6	1850
Common guano		49.7	804
Purified guano		53.9	741
Colombine.		83.0	480
Litter from the silk worm		32.90	1215
Their chrysalides		19.14	2061
Prepared human faeces (Belloni)		35.5	1020
" (Monfaucon)		15.6	2560
Horn scrapings		143.6	278
Cockchafers		32.1	1270
Bones	{ Melted	70.2	570
	{ Moist	53.1	643
	{ Fat	62.1	574
Residue of bone gluc		5.2	7575
Kitchen stuff		118.7	336
Refiners' black		10.6	3770
Animal black		10.9	3669
Earth at	{ Limogne	3.2	12618
	{ Marville	2.2	18274
	{ Boulbene	0.7	55172

The exact values of the different articles mentioned in the above table were determined by analysis which I made for the purpose; it will be necessary, however, to say a few words in explanation of the table.

In the first column you will find the name of the substance employed as manure; in the second column the quantity of nitrogen contained in 1,000 parts of the material; and in the third the number of kilogrammes* required to manure a hectare.†

Our common stable manure has been placed at the head of the table, and taken as a standard. It requires 10,000 kilos. to manure two acres; or, in other words, 10,000 kilos. of a material which contains 4 per 1,000 of nitrogen, will manure the hectare (2.471 English

* The kilogramme is equivalent to 2.205 pounds avoirdupois.

† The hectare to 2.471 acres English.

acres) of ground. The standard then is a hectare, manured with 10,000 kilos. of matter containing 4 per 1,000 of nitrogen. Thus, 5,000 kilos. of a substance containing 8 per 1,000 would produce the same results, and so on.

There are some few other points in the table which also require notice.

On looking at the relative values of the straw of corn, peas, &c., we find that it contains a very considerable proportion of nitrogen, and we are led at once to ask why this straw is given as food for animals, instead of being employed as a manure; and how it happens that the excrement of herbivorous animals fed on straw contains comparatively so small a quantity of azote. In the first place we may observe that the fodder is dry, while in the excrements it is minutely divided, mixed with a large proportion of water, and has already yielded a portion of its nitrogen for the nutrition of the animal.

If we examine the proportion of nitrogen contained in the solid faeces of man or animals, we shall find that it is almost nothing compared with that contained in their fluid excretions; and this must be so. The food of man and animals can only support life in so much as it furnishes to the different organs the elements which they require for their reproduction. All corn, and the fresh or dried herbs which they eat, contain, without exception, principles that are rich in nitrogen. The quantity of fodder or nourishment that an animal requires diminishes in proportion as the food is rich in azotised principles. The life of a horse may indeed be supported by feeding him on potatoes (which contain little nitrogen), but although the animal lives, he scarcely exists, and gives way under the slightest exertion. We are astonished at the enormous quantities of rice consumed, at each repast, by the natives of India; but we understand this when we remember how little azote is contained in rice.

It is evident that the nitrogen of vegetables and corn which supply nourishment to animals is assimilated by them. When digestion is completed, the excrementitious matter passed by the animals does not contain any azote; or if it does, the small quantity mixed with the faeces is derived from the secretions of the liver or intestinal canal; at all events the excrement contains much less azote than the food consumed.

Human faeces contains a greater proportion of nitrogen than that of any other animal; because man eats, not merely to satisfy a want, but to gratify a passion; hence, he consumes more nitrogen than is necessary for his sustenance, and the excess is found in his faeces.

From what I have said, it is evident that, by simply employing animal manure, we restore to the soil less of azotised matter than has been removed from it by the crop; but, on the other hand, we furnish a greater quantity than the atmosphere could supply. The true scientific problem which the agriculturist has to resolve is, how he can best employ the azotised nutriment of plants contained in human and animal excrement, and also in the *debris* of animals and vegetables which are rich in nitrogen. Unless he knows how to convey it in a proper way to his farm, it is almost worthless; a heap of manure improperly employed is just as useful to his neighbour as to himself, for at the end of a few years nothing will remain but the carbonaceous remnant of putrid vegetable matter; the

whole of the nitrogen will have disappeared under the form of carbonate of ammonia.

You must not forget that the younger the organs of a vegetable are, the more nitrogen it contains; this explains why the upper part of straw is much richer in azote than the lower part. This difference is indicated in our table of equivalents; the upper third (0.33) of the blade contains 13.3 per 1000 of nitrogen; while the lower two-thirds (0.67) contain only 4.1. This important fact, which results from experiments made by myself and M. Boussingault, proves that it is advisable to employ the upper part of the straw only for fodder, and the lower for litter.

On looking at the table you will also see that the straw, or stalks of the leguminosæ (peas, lentils, &c.) is much richer in nitrogen than that of the gramineæ (corn, &c.) Every one knows that beans, lentils, &c., are very nutritious. Dwarf peas form the basis of the food of our convicts. The leaves of trees, and particularly those which fall in autumn, contain a good proportion of azote. The different kinds of *fucus*, or sea-weed, which are collected in large quantities along the sea coast, form very excellent manure, especially when mixed with farm-yard dung. For some time back the seeds of the lupin constitute an important branch of commerce in Tuscany; they are sold for five to eight shillings the 200 lbs. The capability of germinating is destroyed by slightly roasting or boiling them in steam. In vine countries the husks of the grape are much employed as manure. Oil cakes, or the residue of the manufacture of oils, by pressure, contain vegetable albumen, gluten, and a small quantity of celluline. They form an excellent manure, and are the more valuable in proportion as they are freed from oily matter, for oil is a substance unfavorable to vegetation. The cakes should be reduced to powder before being mixed with any other substance. The urine of herbivorous animals, as may be seen in the table, is much richer in nitrogen than their feces; hence, the agriculturist should use every effort to collect so precious a material and not allow it to be wasted, as too many of them do. The quantity of nitrogen contained in the dung of goats and sheep indicates the effect which we may expect from it when mixed with that of the cow, horse, &c., to form the mixed dung of the table.

In alluding to guano a difference has been made between the natural and prepared material; the latter contains 4 per 1000 more of nitrogen, because it has been freed, by sifting, of the vegetable residue and pebbles, &c., with which it is mixed. We know that coal furnishes a certain proportion of carbonate of ammonia, when distilled; this is the reason why coal soot contains more nitrogen than soot derived from the combustion of wood.

Feathers, hair, woollen rags, horn scrapings, &c., contain a very high proportion of nitrogen; but from the tenacity of these materials they are not easily decomposed. Generally speaking their disintegration does not take place before five or six years. Hence, we should chiefly employ them for manuring orchards, vineyards, &c. They follow the progress of vegetation slowly; and if we calculate their slowness of decomposition, their richness in azote, and the quantity required for two acres (*hectare*) of land, we can tell precisely the quantity that is required to obtain, during

six years, the same results as those which would ensue from using annually 10,000 kilos. of common manure. Animal black is obtained by mixing fecal matter with a carbonised earthy powder. It is an excellent manure, and was invented, in 1833, by my associate M. Salmon. The discovery, which resolved two interesting questions, the disinfection of stercoraceous matter, and the production of a manure which might be used without previously undergoing putrefaction, was rewarded with the grand Monthyon prize.

ADDITIONAL

ILLUSTRATIONS OF THE WATER-CURE, AS PRACTISED AT MALVERN.

By CHARLES HASTINGS, M.D., F.G.S.,

Physician to the Worcester Infirmary, and Secretary to the
Provincial Medical and Surgical Association.

In my last communication I related the treatment of a case of gout, and particularly noticed that the patient suffered much from being almost smothered under a bed. This clumsy and semi-barbarous mode of producing perspiration has certainly the merit of novelty. At least, as far as tradition reaches, we know of nothing precisely similar to this, unless, indeed, we suppose that the custom of smothering unfortunate individuals affected with hydrophobia under a bed, as practised in some districts in this kingdom, may be considered in the same light, and may at an early period have been brought into this country from the forests of Germany by some wandering tribes. The Silesian peasant has extended this treatment to many other diseases, and it has been proposed as a mode of treatment in this highly-civilised country, being recommended by the hydropathists as a certain cure for "various ills which flesh is heir to." Fortunately, however, the water-doctors have not quite succeeded in depriving all the patients who fly to them for succour of common sense, and, therefore, this part of the treatment has *staggered*—literally so staggered some of them—that they could not be enchanted by the wand of the magician.

But to be serious. This said mode of producing perspiration, by putting a patient between a bed and a mattress, which is so frequently had recourse to by Priessnitz and his adherents, is a horrid mode of dealing with an invalid; and if one may believe report, not a few English people rebel against this Germanic custom. Not that the heroes who are engaged in these mountebank performances would ever allow this to transpire, but the truth will ooze out and find its way to the world; that some of the Malvern water-doctor's patients have rebelled against this *novel observance* is certain, whilst others have well nigh paid the debt of nature by imprudently persisting in this extraordinary course.

My object at present will be to reveal to your readers some of the secret performances. And first of all, in order that I may not be supposed to set down aught in malice, I will give verbatim an extract of a letter which has happened to fall into my hands, wherein one of the water-doctor's own patients graphically describes the goings-on at this English Graefenburgh, especially in reference to his own personal experience of what may be appropriately called a

bed-scene. The gentleman says—"As for hydropathy as a general specific, it is utter nonsense. Gout and rheumatism are relieved, and some cases of fever it succeeds in, and people of long-standing habitual constipation seem to have benefitted; but in asthma, tic, acute diseases, dropsy, apoplexy, or surgical cases, it is of course an utter failure. Good is no doubt done by early hours, exercise, and abstinence, but a cure never or rarely effected. Dr. — is a conceited, impudent, off-hand sort of a person, and he goes about telling everybody of his success and wondrous cures. He states he has cured Lord —, but this I do not believe to be the fact. The general class of patients here are old Indians from Cheltenham, hypochondriacal ladies, and dyspeptics. What is useful in hydropathy will be added to general practice, and then it will follow St. John Long, mustard-seed, and brandy and salt. The system is new, and may perhaps last a year or two.

"On my arrival here I was subjected to the sweating process—four blankets and a feather-bed over me—and in ten minutes I felt giddy, the room ran round, lights came before my eyes, and just before consciousness departed I flew out of bed. Once more I tried it with a similar effect, adding vomiting to all the other disagreeables. Had I had a fit the danger would have been imminent. I therefore gave up all idea of submitting to further mountebank folly. The whole affair is a humbug, as far as its being a universal cure."

I am not acquainted with this gentleman, and have had no opportunity of knowing what the complaint was that called for the administration of this heroic remedy; but be this as it may, the patient, it appears, had complete nausea, and it is very desirable that this gentleman's opinion, derived from personal experience, should be widely disseminated, in order that these mysterious doings should not be kept secret; for, indeed, I fear that in some instances, could the whole truth be made manifest, it is not to be doubted that death would speedily follow the employment of this rude and extraordinary remedy. Whether homicide in such cases is considered in the eye of the law as justifiable, I am not lawyer enough to determine; but it is a point, in all probability, which will not long remain undetermined, should this mode of treatment prevail to any extent, for coroners generally are not negligent people, and should such a case be presented and a legal opinion sought, they will not fail to charge the jury to the effect that it is contrary to the spirit and intention of the law of England that death should thus be brought upon her Majesty's liege subjects by these experimental bed sweatings.

Eliz. Sherwood, aged forty-five, who had been occasionally a patient of the Worcester Infirmary, and had been for a long time complaining of pain in her limbs, between the shoulders, and in the chest, and had also had occasional attacks of difficulty of breathing, would, had she followed out the plan, have fallen a victim to this barbarous treatment. She went to the water-doctor in the month of August, who assured her he could cure her in a fortnight. He commenced the treatment by having the stomach and bowels fomented with hot flannels, and cold wet rollers were put as a bandage around the knees and ankles. Shortly afterwards she was every day put under a

bed prepared in the following manner:—She was first of all enveloped in a blanket, and upon which two others were placed and a coverlet; to the weight of which was superadded a feather bed. Under all of these she lay for two hours and a half, or until a profuse perspiration broke out. She then left the bed, and was put into a bath eighteen inches in depth, and was well rubbed. After this she dressed herself, and walked out, and whilst in exercise drank some cold water. She was ordered to drink nothing but water, or milk and water, and to observe strictly a low regimen.

This plan she followed five weeks, when she became much emaciated and reduced in strength, and, to use her own expression, was ready to die, and all her usual symptoms were aggravated rather than relieved. She, therefore, made up her mind to abandon the course, and to apply for relief to the Worcester Infirmary, where she was admitted on the 1st of October, suffering greatly from weakness and emaciation, and being much affected by difficulty of breathing, and pain in the chest and limbs. She was put upon good diet, and was ordered a blister to her chest. Soothing medicines were given, under which she soon began to improve, and in a month was nearly convalescent.

REMARKS.

'This is a notable instance of the application of the smothering and sweating bed-process to a poor, half starved hypochondriacal woman, already brought into a great state of weakness and misery by poverty and wretchedness. No wonder that, after submitting to this exhausting system for five weeks, she should find herself *ready to die*, and dreading what might occur, give up further trial of it. It may further be observed, that the adoption of a very spare diet and active exercise, in a poor, worn down patient, who had for years been scarcely able to get food enough to keep body and soul together, was anything but judicious. No doubt a diet of rice and simple food, together with active exercise in the salubrious air of Malvern, is well calculated to restore the lost tone of stomach of the corpulent alderman or of the country squire, who may have pampered his appetite and stimulated his stomach to enervation, by all the piquant dishes which the art of cookery so well knows how to supply; but to apply this same regimen to the cure of a poor, half-starved patient, seems contrary to all rational treatment. In fact, the event of the case proves the accuracy of these remarks, for no sooner did she get into the infirmary, where she had a more nourishing diet, and was freed from the annoyance resulting from the water applications, than she became much better, and in a month was enabled to return home nearly convalescent.

CAULIFLOWER EXCRESCENCE OF THE ANUS—SCIRRHUS OF THE PANCREAS—CONTRACTION OF THE DUODENUM—HYDATID OF THE BRAIN.

By J. TANNER, Esq., Surgeon, Ledbury.

On Sunday, October 3, 1841, I was sent for, for the first time, to see a well known sportsman, of frugal habits, aged fifty-one, living about eight miles from hence. The following is a brief history of his case:—

Has for twenty-five years suffered severely from indigestion, for the relief of which he has consulted at different times upwards of thirty medical men, with little, if any, permanent relief. The leading symptoms were—vomiting after taking food, occasionally accompanied by the most intense pain in the epigastric and hypochondriac regions, which would sometimes last, without a moment's abatement, for forty-eight hours, and sometimes produce insensibility; for three months together the disorder has prevented his having one good night's rest. Attacks would occasionally come on whilst pursuing the chase, and oblige him to dismount, and roll upon the ground in the most intense agony. Pressure at these times seemed to relieve him; the pain would now and then give way as suddenly as it arose, in which case he would remount and pursue the exciting sport. For the last five years, from the recommendation of an acquaintance, he has taken carbonate of soda in large quantities, to the amount occasionally of a pound in a week; this was the only thing that appeared at all to relieve him. His appetite, during the above period, has generally been good—in fact, he could, at any time, have eaten with avidity immediately after vomiting, but refrained, as he was well aware his only comfort was an empty stomach; the excretions were scanty. For some months past, in addition to his "old complaint," he has had occasionally confusion about his head, giddiness, and loss of vision; when turning round suddenly, or looking up, he would stagger and nearly lose his equilibrium, and objects have appeared to wear a red or yellow color; these symptoms, however, were never so violent as to prevent his following his usual avocations; sensation and volition were always intact. For this affection of the head he has been bled twice or thrice, but nothing more has been done. Furthermore, for the last eighteen months he has suffered much inconvenience from a copious discharge of watery fluid from the anus, to the amount of some ounces per diem; the discharge is occasionally mixed with blood; he suffers no pain in the part excepting from injury.

Present State.—Complains of twitching all over him, especially when touched; if tapped gently on any part of the head, the limbs spring as if from an electric shock; has great confusion about the head, with wandering, but mind perfectly normal when aroused; describes accurately the history of his case, and wonders much what can be the cause of his present symptoms; has lost strength and flesh rapidly since Thursday last, on which day he was out hunting, and felt much as usual, but weaker; in now attempting to walk he feels giddy, and totters; has no pain or heat about his head, nor any aversion to light; pupils rather contracted; he throws up what he takes, but does not feel sick; no appetite; is thirsty as usual; bowels natural, and makes plenty of clear, pale-colored urine, which does not coagulate when heated; pulse feeble, soft, and quick; skin cool and dry. Upon examining the anus, an excrescence, the size of a walnut, presented itself; its surface uneven, dense, and unyielding in texture, covered by mucous membrane, and discharging copiously a watery fluid; the tumor was evidently of that kind described by Clarke as cauliflower excrescence.

The treatment consisted in the use of a spirit lotion

to the head, sinapisms to the feet, aperients, calomel, and morphine; depletion, under all the circumstances, was not deemed advisable. Although he continued to get worse, yet he retained his consciousness for the first forty-eight hours; he had, however, occasionally epileptic fits (and of this character, I consider, were the attacks spoken of in the history of his case); after this period he became comatose, having fits occasionally; and expired at four o'clock, a.m., on Thursday, ninety hours after my first visit.

Autopsy Forty-eight Hours after Death.

Head.—Vessels of dura mater and brain much distended with dark blood; no inflammation of cerebral membranes; serum beneath the arachnoid, and an ounce and a half in lateral ventricles; immediately anterior to the corpora quadrigemina, and above the foramen of Monro, was an hydatid sac, about the size of a small nutmeg; the sac had given way, and the contents had escaped into the ventricles; around this the brain was softened to the extent of an inch and a half; all the other parts of the brain were healthy.

Abdomen.—He has oblique inguinal hernia of right side, easily reducible. Upon opening the abdominal cavity the general appearance was healthy, but upon further examination the stomach was found double its usual size, and its coats thickened, but in other respects it was healthy; pyloric orifice natural; the duodenum at its first turn was firmly adherent for an inch to the head of the pancreas, which was much enlarged, and measured upwards of three and a half inches in a transverse diameter; when cut into it presented a light color, and was of a firm gristly texture; the appearance of the connection was that of puckering in, as when the nipple is drawn when the neighbouring mammary gland is scirrhus; the intestine was not diseased, though contracted by the above connection, so as to admit with difficulty the passage of a goose quill; small cicatrices were visible in the mucous coat of the intestine, above and below the strictured part; the rectum was healthy, as were all the other viscera.

May not the pathology of this case be, that first the pancreas became diseased, the intestine was next implicated, and the stomach thirdly deranged; the brain affection was probably brought on by reflected irritation and the directly exciting effects of pain?

Ledbury, Nov. 4, 1812.

ANOTHER MAN WITH THREE TESTICLES.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Allow me to inquire, through the medium of your valuable Periodical, in reference to the notice of a man with three testicles, detailed in your last Number, whether or not any injury occurred during infancy to the right testicle, by which it might have been divided and the appearance of two testicles produced. I have a patient in every respect like the man mentioned by Dr. Macann; but the supernumerary testicle is situate on the opposite side. On the right side of the raphé there is a testicle of normal size; on the left are two bodies, or testicles, as they may be termed, nearly equal in size, but neither quite as large as the regular testicle. They are not in im-

mediate contact; one seems suspended above the other; both are smooth, tolerably oval, and to each a chord is attached.* The history of the case is this: whilst a very young child a nursemaid had, in play, crushed the testicle with a pair of tongs, and on recovery from the injury it was found that the testicle was divided, and has ever remained so since; gradually increasing in bulk with the growth of the person, who is an athletic man, the father of a fine family of children.

As you have added some observations to the case of Dr. Macann I have sent the above statement, thinking it may prove a solution to some others recorded as examples of supernumerary testicles.

I am, Gentlemen,

Your obedient servant,

JOHN PRANKERD, Surgeon.

Langport, Somerset, Nov. 8, 1842.

ON THE
MORTALITY OF CHILDREN
AT THE

MILITARY ASYLUM, SOUTHAMPTON.

By J. HENNEN, M.D.,

Late of the Royal Military Asylum, Southampton.

The following facts, abridged from official returns of the number and cause of deaths among the children of the late Royal Military Asylum, Southampton, are not without interest to those engaged in statistical inquiries, and with that view I forward them for insertion in the "Provincial Medical Journal."

The Royal Military Asylum was founded for the reception of the orphans of soldiers, and the branch at Southampton was opened in October, 1817, for the reception of the younger male children of the parent institution. In 1825, the boys were removed to head quarters, and the institution at Southampton was exclusively appropriated to girls and to boys under seven years of age. In 1835, the admissions were greatly restricted, with a view to the ultimate abolition of that branch of the asylum, and the few remaining children were ultimately removed to Chelsea in November, 1840.

For a period of eighteen years, from October, 1817, to October, 1835, there were admitted 5,427 children, and during that period there occurred in all 39 deaths—viz, from tuberculous disease, 14; measles, 11; hydrocephalus, 4; convulsions, 4; hooping cough, 3; fever, 2; diarrhoea, 1—Total, 39. A fraction more than one-third of the whole died of tuberculous disease, and one-half of these before the fifth year, the other half between the ninth and sixteenth—corroborating the opinion of Andral, who, from his extensive experience, remarks that tubercles are most prevalent from the first to the fifth year; that they appear in much greater quantities, and in a greater number of organs at once; and that more than one-fourth of those who die from birth to puberty are affected with tuberculous disease. As the tendency to this disease appears to be

the consequence of imperfect assimilation, there can be no doubt that we are possessed of the means of correcting this predisposition in many instances. Of this fact I have had abundant experience among the children of the Military Asylum. Few of the children, on joining this institution, were exempt on their admission from a tendency to tuberculous disease, which may reasonably be attributed to privations of different kinds, neglect, deficient nourishment, &c. &c. The great majority of the children on their admission, and many for a long period afterwards, exhibited a strong tendency to struma, evidenced particularly by a disposition to a congestive state of the abdominal contents, impaired powers of digestion, depraved secretions, dry, harsh skin, and a tendency to eruptions, and ophthalmia (especially denominated strumous); whilst under the ordinary circumstances of children of the same class, it has been calculated that five-sixths of those affected with tuberculous disease perish; it is a gratifying and a very important fact, that by placing children under circumstances the most favorable to health, as regards food, air, clothing, and exercise, the constitution becomes so improved as to overcome this predisposition, and, as we have seen, only fourteen cases of tuberculous disease proved fatal amongst 5,427 children of all ages.

London, November 10, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, NOVEMBER 19, 1842.

The poor-law commissioners have recently published, through the medium of their secretary, Mr. Chadwick, a very elaborate report on the sanitary condition of the laboring population of Great Britain. It might fairly be asked, *in limine*, how the direction of so difficult and complex an investigation was entrusted to a gentleman completely ignorant of the subject submitted to his inquiry; how a poor-law secretary—unacquainted with the most simple laws of the human economy, and possessing not a particle of that preliminary knowledge which is essentially necessary to every one commencing a special investigation—should take upon himself to examine facts and form conclusions connected with the public health. Such, however, has been the case; and as "her Majesty's principal Secretary of State for the Home Department" has thought fit to select Mr. Chadwick for the purpose of inquiring into the sanitary condition of the people, we shall endeavour, as loyal subjects, to regard the selection as a fitting one, and to pay all due deference to opinions which emanate from so high an authority.

Our ideas of fitness and the promptings of common sense are, indeed, wonderfully disturbed by the appearance of Mr. Chadwick as an authority on hygiene; and the necessity of noticing his report places us in the awkward position condemned by the proverb, of

* It is impossible to conceive how any injury to the testicle, after birth, could cause the development of a double spermatic chord. In the case related by Mr. Prankerd, the anomaly must have been congenital; but attention was not probably directed to the state of the organ until after the occurrence of the accident.—Eds.

endeavouring to "make a silk purse of a—" &c.; but to this necessity we submit, because we must take Mr. Chadwick's report or have no report at all. This conclusion is inevitable. The poor-law commissioners have resolved, *inter alia*, on seizing by anticipation on the duties of a board of health, on constituting themselves into a council for the regulation of all matters connected with public hygiene; and the present report is evidently put forth as a feeler upon this matter. To have entrusted the report to any medical man, or any body of medical practitioners, would not have suited the views of the commissioners; they accordingly forced their secretary upon Lord John Russell, employed themselves diligently in the collection of a vast body of facts, and now come before the public and the government with an official report on the causes and prevention of disease amongst the laboring classes.

The observations which we have just made are rather addressed to the source whence Mr. Chadwick's report has emanated than to the report itself which, on the whole, is creditable to the industry of its author. With the vast resources at the command of the commissioners, and the ready (though *gratuitous**) assistance which they received from medical practitioners in all parts of the kingdom, it is not surprising that a mass of highly useful and important information has been collected. Many efficient sources of disease have been altogether overlooked, and many (the effects of bad or deficient nutriment, for example) kept out of sight; there is also a want of clearness and method in the report, arising from the reporter's ignorance of the subject entrusted to his inquiry; but, as we have said, a number of important facts have been collected together, and to their exposition we propose devoting a series of articles.

As it is unnecessary to follow exactly the plan pursued by Mr. Chadwick, we shall commence with the chapter of his report devoted to "the general state of the law as regards the protection of the public health." If the statements of Mr. Chadwick be correct—and upon this part of the subject, at least, he is probably well informed—there exists no effective provisions of any kind, either local or general, for the protection of the public health in these kingdoms. The only evils remediable by law are such as come within the definition of "nuisances."

"The common law provided general remedies for the redress of injuries, under the comprehensive title nuisance (*nocumentum*), meaning anything by which the health or the personal safety, or the conveniences of the subject might be endangered or affected injuriously. By the law as it now stands, the subject

is entitled to protection against things which are offensive to the senses, from which no injury to the health or other injury can be proved than the often overlooked but serious injury of discomfort, of daily annoyance, as by matters offensive to the sight, as by allowing blood to flow in the streets; by filth, by offensive smells, and by noises. The injuries termed nuisances were threefold—first, public or general; second, common; third, private. 'Public is that which is a nuisance to the whole realm; common is that which is to the common nuisance of all passing by; private is that which is to a house or mill, &c.' (2 Institute, 406.) A common nuisance is defined to be an offence against the public 'either by doing a thing which tends to the annoyance of all the king's subjects, or by neglecting to do a thing which the common good requires.' (Hawk, p. 1. c. 107, c. 75, f. 1.) For the private injury there was the remedy by civil action; for the common and the public injuries, the remedy was by indictment."

Several examples are adduced of the manner in which this principle of common law has been applied to the removal of causes acting, or likely to act, injuriously, on the health of the public. Thus, it is held to be a common nuisance, and indictable, to divide a messuage in a town for the habitation of poor people, by which it will become more dangerous in time of infection.

The stopping of wholesome air is held to be a nuisance, as well as the stopping of the light; and Sir Edward Coke shows the form of an action on this latter case to be "*quod messuagium horridâ tenebritate obscuratum facit.*" But it may be difficult to reconcile this maxim of ancient law with the enforcement of the window-tax, for many a householder is compelled to dwell "in a horrid state of darkness," because he cannot afford to admit the light of heaven in decent quantity.

The corruption of water is also an offence at common law, and was early the subject of a statutory provision. Many other acts were likewise considered in former times as injurious to health; thus, when sea-coal was employed in 1290 for the purpose of burning lime, "The Carmelite friars of London, the friars-preachers, the Bishop of Salisbury, and others, petitioned parliament to abate a nuisance (*viz.*, a great stench) near them, which they could not endure, which prevented them from performing their religious duties, and from which several of the monks had died."

Many sanatory regulations are set forth in the provisions of old acts for the regulation of the streets, and in the modern "Sewers and Street Acts," but the most important, perhaps, because the most cheap and accessible authority for reclaiming the execution of the law for the protection of the subject against nuisances, and for punishing particular violations of it, is vested, according to Mr. Chadwick, in the courts leet. These are composed of juries,

* "The commissioners have *no money* to remunerate physicians who make reports on the circumstances promoting the prevalence of contagious and infectious diseases; and those named should be distinctly informed that the service will be purely honorary."—*Commissioners' Circular*.

commonly called "annoyance juries," impanelled to serve on courts leet in towns, who are accustomed to perambulate their respective districts and judge of nuisances upon the view.

The courts leet, then, are all that we have in this enlightened country to represent boards of health. Let us see how they are constituted, and in what manner they fulfil the important duties entrusted to them. In the rural districts they have generally fallen into disuetude. In towns, courts leet are occasionally held, and inquest juries appointed, but as the reporter justly observes, they are usually composed of tradesmen, who attend unwillingly, and at an inconvenient sacrifice of time; who can have little or no information relative to the evils in question; who have no arrangements to bring those evils before them; no time to digest such information as may be casually laid before them; little interest and scarcely any real responsibility imposed; and neither time nor adequate means at their disposal for the removal of evils when they are proved to exist.

The following picture of one of those "annoyance juries" sufficiently proves their utter unfitness for the duties now imposed upon them:—

"When we were sworn in we went over the district; we went through many places which were disgustingly filthy, that I have since learned were places where there is always fever, but we were not told about it; the afflicted knew nothing of our coming, and we had no medical officer, or means to enable us to detect the presence of any nuisances which would endanger the public health.

The number of persons sworn in was twenty-four, of whom I can remember six were publicans (at one or other of whose houses we dined on the days of meeting), one or two cheesemongers, three or four tailors or drapers, one builder, and one bricklayer; the trades or occupations of the remainder I cannot remember. Of the twenty-four sworn in, twelve only served, and the duties were performed in rotation. An allowance of 2s. 6d. was given to each jurymen for his expenses on the days of acting, with the exception of the foreman and the secretary, who had been unfortunate enough, or who, for some purpose of their own, managed to be sworn in on three or four previous occasions. None of the jury knew the nature of the duties further than that they were to examine weights and measures; that part of their duty respecting the removal of nuisances, or of things affecting the health or the lives of the inhabitants of the district which we perambulated, was entirely neglected or lost sight of; the only instance that I remember of any attention being paid to the subject, was that of the condemnation of an old house in a disgusting neighbourhood of houses; and in this case, although the house certainly looked in a bad condition, the jury were quite unable to come to a decision until the bricklayer and builder pronounced its condemnation, when the jury at once became unanimous, and condemned the house forthwith. My own impression was that the house was not in a safe condition, but I felt, in common with others (the tailors,

drapers, and cheesemongers), that however anxious we might be to discharge our duties faithfully, that the nature of our occupations did not at all qualify us to express an opinion upon the subject, and hence we were all guided and determined by the opinion of the bricklayer and builder who happened to be present. Had they not been present we should probably have done nothing. It is only necessary for any sensible person to serve on such a body in a town to be convinced of its entire inefficiency."

From the preceding observations it would appear that the care of the public health in this country is entrusted to the common law, and to "annoyance juries." The latter are well named, being both an annoyance and a nuisance; they are utterly inefficient. On the other hand, it is ridiculous to speak of the common law as a means of protection against injuries to public health, because the expenses of litigation are ruinous in the extreme. One instance is related of a gentleman in Scotland who took up the defence of his tenants in a case where a stream, which supplied the village, had been spoiled by some dye-works. The litigation involved an expenditure of about £4,000. We may, therefore, conclude with Mr. Chadwick, that in the present state of the law no efficient means of removing or correcting injuries to public health exists; and we may add, that means of prevention are altogether overlooked by the legislature.

Such being the case, we need scarcely wonder at the picture of the sanatory condition of the laboring classes drawn by Mr. Chadwick, or at the frightful extent of evil produced by the neglect of the most simple rules of public hygiene.

In our next article we shall take up the question of the injuries inflicted by various causes, the operations of which are clearly within the control of legislative enactment.

BRITISH MEDICAL ASSOCIATION.

A meeting of this society took place last week at the British Coffee House; Dr. Webster, of Dulwich, in the chair.

The chairman, Dr. Grant, of University College, Dr. Marshall Hall, and one or two others, made speeches; but they all "hung fire" most lamentably, and the meeting proved a complete failure. Professor Kidd and Sir James Clark were elected honorary members; and of the profession in the United Kingdom, on this great occasion of the annual meeting, no fewer than *two* were added to the list of ordinary members!

The only thing during the evening worth listening to was the oration of Mr. Grainger.—*Medical Gazette*.

REVIEWS.

On the Preservation of the Health of Body and Mind.

By FORBES WINSLOW, M.R.C.S., &c. 8vo, pp. 202. London: Henry Renshaw.

No subject connected with the science of medicine has been so long neglected, or regarded with more indifference, than insanity; yet there is none which abounds with greater interest, or opens such a fertile field of inquiry to the medical philosopher and philanthropist. Until of late years the history of mental disease was enveloped in the deepest obscurity, and the most erroneous and unenlightened views prevailed regarding it. This can only be accounted for by the indisposition of the profession to devote time and labor to a subject so abstruse and immaterial as psychological medicine; and the prejudice commonly entertained against metaphysical speculations, which arises from an apprehension that the subjects about which they are employed are placed beyond the reach of the human faculties, and from a belief that these subjects have no relation to the business of life. Medical men are not fond of dealing with abstractions; they like to have something material to work upon; and hence, in this matter of fact age, in which *cui bono*? is the watchword in all scientific pursuits, the study of the philosophy of the human mind has been too generally regarded as an idle speculation, which finds its most appropriate bidding-place amongst the vain and unprofitable disquisitions of the schoolmen.

The study of insanity is, however, inseparably connected with that of the science of mind, and the light which a philosophical analysis of the principles of the latter would necessarily throw on the subject of mental disease must be obvious to all. Indeed, we cannot expect to arrive at sound views with regard to the mind in a diseased state, unless we have some acquaintance with its powers and operations in a healthy condition; and, until the study of what may be called medical metaphysics, or psychological medicine, becomes a part of medical education, and is taught generally as a distinct branch of medical science, our knowledge of those lesions which constitute insanity must be vague and uncertain. All that we know of the body (says Dr. Reid*) is owing to anatomical dissection and observation, and it must be by an anatomy of the mind that we can discover its powers, principles, and actions.

A new era, however, has dawned upon this department of medicine. The humane and enlightened views of the treatment of insanity first propounded by Pinel, and followed out by Esquirol, have been recently introduced into this country, and cultivated on an extensive scale by Dr. Connolly at the Hanwell Asylum, and are now finding their way into other institutions of a similar kind throughout the country, many of which were decidedly opposed to them at first. The barbarous and inhuman system which has been so long enforced by the lash and the strait-waistcoat, is now happily on the decline; and we

* An Inquiry into the Human Mind. By T. Reid, D.D., &c.

hope ere long that Dr. Connolly will have the satisfaction to see his benevolent and philanthropic exertions crowned with success—by the universal adoption of those rational and humanised principles which he has so perseveringly followed out in the treatment of the insane. It is with no ordinary feelings of pleasure that we hail the institution of a chair of mental pathology at the Hanwell Asylum. It augurs well for the future; and from the commencement of those clinical discourses on insanity recently pronounced by Dr. Connolly in that establishment, we may date the first successful attempt in this country to cultivate the subject as a distinct branch of science.

The foregoing reflections have occurred to us from the perusal of some excellent remarks on the nature and treatment of insanity in the work whose title is placed at the head of this article. The author has evidently studied the subject well, and reflected deeply on it, and, moreover, he has the good fortune of being able to convey his information in a clear and pleasing form. Mr. Winslow dwells forcibly on the necessity of studying the morbid manifestations of the mind in their early or incipient stage, before decided insanity is established, and is of opinion that by a timely detection of the premonitory symptoms, and the application of appropriate measures, the development of the disease may in most cases be prevented. We shall, however, let the author speak for himself on this point.

"The most important branch of this subject (says Mr. Winslow) is that which relates to the early symptoms of insanity; for in proportion to our being able to detect them are we successful in the application of remedial agents. The following symptoms are considered to indicate the existence of incipient insanity. The patient manifests a sudden change in his usual habits of life; he neglects his ordinary occupations; his affections and temper become changed; he manifests a restlessness, indecision, absence of mind, and love of solitude. The memory is said to be the first faculty which becomes weakened. At the beginning of an attack of insanity all objects frequently appear to be on fire. The patient hears unusual sounds; he fancies persons at a distance are speaking to him. He becomes suspicious even of those most nearly related to him. His mind is often disturbed by distressing visions during the night. The moral feelings often undergo a complete revolution. These mental signs are generally attended by physical indications which assist the medical man in his diagnosis. Any change from the usual and ordinary habits should awaken suspicion."

There is much truth in these remarks, which are further supported by the statement of Pinel, that the greatest number of recoveries from madness take place in the first month of its duration. Insanity being invariably the result of physical disease of the brain, adds the author, it is reasonable to suppose that the longer that organic lesion is allowed to remain undetected and unremoved, the probability of recovery will be lessened.

Mr. Winslow next proceeds to discuss the variety of insanity called monomania, and this part of his subject is richly illustrated with numerous singular and interesting cases. In adverting to the difficulty of drawing a line of demarkation between eccentricity

and actual madness, or of being able to tell where one condition of the mind ceases to exist and the other commences, he very justly observes, "The difference between eccentricity and monomanism is merely a difference of degree; and any other difference, than in extent, between monomanism and confirmed madness, it were difficult to specify." The author is a zealous advocate for the "soothing system," and concludes his remarks on the moral treatment of the insane with a spirited philippic against all madhouses and mad doctors engaged in perpetuating the barbarous atrocities of the old school. Under the head of "Mental philosophy considered as a branch of medical education," we find many excellent and judicious observations as to the *practical* utility which medical men may derive from the study of the science of mind. The truth of the following remarks will, we have no doubt, be admitted on all hands:—

"The study of mental philosophy (says Mr. Winslow) thoroughly disciplines the understanding; it also gives precision to language and thought, and induces habits of close attention and patient application of mind. The practitioner of medicine *ought* to be endowed with the true spirit of a philosopher. It may be true that it does not require a very expanded or elevated tone of mind in order to enable the physician or surgeon to wield the agents of the *materia medica*; but he who conceives the art of treating disease to consist in the exhibition of medicinals, entertains an ignoble idea of the principles of his profession. Medicine ought not to be practised as a *trade*, but as a *science*."

There is a separate chapter devoted to the subject of "Diet and dietetics," which is well worth perusal, and the work closes with another—by far the most important in the volume—"On the first indications and early treatment of insanity." It would be impossible in our very limited space to enter as fully into this excellent essay as it deserves, and, therefore, recommending it to the attention of our readers, we shall conclude with the following brief quotation touching the feelings of the patient in the incipient stage of madness:—

"In the first place it is important to know that, for some period before the mental delusion becomes apparent to others, the patient himself is conscious of the approach of the afflicting malady, and often struggles against the notions and impressions which are forcing themselves upon his mind. It is at this period, when the patient is combatting between conscious infirmity of mind and actual insanity, that the physician is able, with marked utility, to administer relief. If this be allowed to pass away, and the patient sinks into a state of apathy, the prospects of recovery will be immeasurably diminished. Few, however, at this early period will confess themselves to be laboring under the premonitory signs of insanity. If any suspicions are surmised, the idea is indignantly repudiated."

In conclusion we have merely to say, that we have derived both pleasure and profit from the perusal of Mr. Winslow's useful and entertaining monograph, and we can confidently recommend it to the attention of all of our readers who take an interest in the subject of which it treats.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

November 8, 1842.

Dr. WILLIAMS, the President, in the Chair.

Case of Paralysis without Loss of Sensation, from Disease of the Cervical Medulla. By JOHN WEBSTER, M.D., &c.

As considerable attention has recently been directed to affections of the nervous system, especially since the important discoveries of Sir Charles Bell and other physiologists have thrown much light on these intricate questions, any new facts must always possess interest, even if they should not clear up some of the difficulties embarrassing the subject. With the view, therefore, of contributing to this desirable end, the author begged leave to bring before the society the following interesting case of a gentleman who had been his patient for several years:—

W. H. G., Esq., aged thirty-six. In 1836, Mr. G. had a phagedenic ulcer of the left leg, which got well after some months; but it again broke out in 1839, when he had also a large chronic ulcer on the posterior pharynx of some duration, but not of a syphilitic character. He had pains in the head, with very costive bowels, during the greater part of the year 1839; in January, 1840, epileptic attacks, with very slow pulse, now supervened; and in the spring following, Mr. G. had spasmodic contractions of the lower limbs, accompanied by a sense of weakness in the back; and latterly he lost the use of his legs, and ultimately the entire control over every muscle situated lower than the neck. During the last twelve months of the patient's life, the whole body was paralysed, excepting the head, neck, and diaphragm, by which breathing was entirely carried on, and not by the muscles of the chest. However, sensation remained perfectly natural throughout the entire surface of the body; and towards the termination of the disease, the patient's feelings were even more acute than usual, and he could always tell, on the slightest touch of a bystander's finger, the exact spot to which it was applied. Severe spasmodic twitchings of the legs and arms were now more frequently noticed than before, and these were sometimes so violent as almost to throw the patient off his couch. The extremities were often very cold, but occasionally they felt also burning hot, with a sensation of excessive coldness in the epigastrium. The urine was drawn off by the catheter for many months, but latterly it passed involuntarily, as the feces did likewise. All the symptoms continued unabated in violence to the last, and the patient died in July, 1842, but retaining his intellectual faculties perfect until the last.

Treatment.—Medicine had very little influence in arresting the disease, although the treatment may have relieved the severity of some of the symptoms. The remedies consisted principally of purgatives, mercury, sarsaparilla, hydriodate of potassa, strichnia, and morphia to procure sleep or allay spasm. Other means were also used, but the treatment which appeared to produce the most benefit was active purging, and the tincture of cantharides taken as a diuretic; at the same time that a copious discharge was kept up for

many months consecutively from two large issues on the nape of the neck.

Autopsy.—Nothing particular was found in the head, excepting that the arachnoid membrane over the pons varolii adhered to the parietal layer of that tissue, and about two ounces of serum were found in the ventricles; but there was no tumor or change of structure either in the brain or in the cerebellum. The thoracic and abdominal viscera were healthy, with the exception of the bladder, which was much contracted in size, thickened in its coats, whilst the omentum and some of the small intestines adhered to its surface. On opening the spinal canal, the theca, corresponding to the three or four lower cervical vertebræ, was much distended; the arachnoid cavity was filled with lymph, and there were adhesions of the membranes to the chord, which appeared firmer at the anterior than at the posterior portion, and the parts were inseparable. The chord itself was longer than usual at this particular point, felt soft and pulpy to the touch, and on being divided it was found to be in an almost diffuent state, infiltrated with serum, but of a natural color. For the extent of half an inch above this point the chord exhibited a dusky red color, but there was no difference observable betwixt the two columns, being alike softened and discolored; the parts above and below being perfectly healthy, and of a natural appearance.

ACADEMY OF MEDICINE.

November 8, 1842.

The great part of this and the preceding meetings was occupied by a discussion between M. Guérin and M. Bouvier on division of the flexor tendons of the hand.

URINARY FISTULA.

M. H. Larry communicated a very curious case of urinary fistula, which he had cured by operation. The subject of the case was a female who had been long subject to urinary fistula situate beneath the umbilicus; the disease originated in inflammation of an ovarian cyst, containing hair, which had communicated on one side with the bladder and on the other with the parietes of the abdomen. The contents of the cyst, composed of viscid and purulent matter, hairs, and calcareous concretions, had been discharged at various times from both orifices. At length a large calculus formed in the bladder, and, getting entangled in the opening of the ureter, had forced the urine to issue, almost constantly, through the fistulous orifice in the abdomen.

After considerable reflection, M. Larry determined on performing an operation founded on the principle of lithotomy, as practised above the pubes. With this object he divided the fistula freely inferiorly, exposed the cyst, extirpated a tumor to which adhered a long lock of hair and followed the latter into the bladder, where it formed the nucleus of the stone, which he removed. The immediate effects of this very formidable operation were comparatively mild, and the patient recovered perfectly.

SHEFFIELD MEDICAL SOCIETY.

Nov. 3, 1842.

Mr. OVEREND in the Chair.

SUSPECTED POISONING.

The subject announced for the evening's discussion was a paper by Dr. Favell on "certain morbid phenomena illustrative of the reflex function of nerves;" but in consequence of two gentlemen having come from a distance in the country for the purpose of laying before the society the details of some cases of suspected poisoning, Dr. F. consented to postpone the reading of his paper till some future meeting.

All the cases occurred in the members of one family, and the following are the principal facts which were detailed:—About five weeks ago, three persons, out of a family of six, residing in a village in Derbyshire, dined off dumplings made from a stone of flour which had been purchased at a neighbouring shop, and which, before being used, had stood, for at least one whole day, uncovered on a table in the house. Very soon after dinner, those who had eaten were seized with violent pain in the epigastrium, vomiting, and purging. The disturbance in the bowels, however, was very much greater in two of the cases than in the third. The remaining three of the family, who were not at dinner, came home to tea, and ate of bread made of the same flour as the dumplings. They, too, were speedily seized with similar symptoms to the three former. The whole family was in perfect health before partaking of the dumplings or bread. The surgeon who was called in at first suspected that the whole had been poisoned by mushrooms. The consecutive symptoms, however, as well as the people's own statement, soon induced him to take a very different view. After the violence of the symptoms subsided, very formidable phenomena still remained. The whole continued to droop and waste away. The inferior extremities became, in a considerable degree, paralysed; the abdomen assumed a flattened appearance; the hand was partially powerless, and there was considerable pain through the ball of the thumb. In sixteen days the father of the family, aged fifty-seven, died, and was buried, unhappily, without any post-mortem examination being performed. The rest of the patients, up to the present time, have gradually become worse. The emaciation is extreme, the prostration excessive, and the pulse remarkably rapid, beating in some about a *hundred and sixty strokes in a minute*. In some of the cases the diarrhoea still continues, whilst in others it has been succeeded by obstinate constipation. No tenderness has been discovered by a very accurate examination of the spinal column.

It is proper to remark that there have not been very often cases of sudden illness in the neighbourhood. The dumplings and the bread were cooked in iron pans, and the water which was mixed with the flour was taken from an open well, and is constantly used by the whole neighbourhood. The family deny having had anything poisonous in the house, and it appears that they are on good terms with their neighbours. In the confusion, when all were taken ill, the remnant of the stone of flour was lost sight of, and its history cannot now be traced. The whole of the baking of bread was eaten at intervals, and in small quantities at a time, by the sick family.

There naturally arose, from the foregoing details, two topics of inquiry—viz., first, whether the symptoms which have been described were occasioned by poison, and secondly, assuming poison to have been administered, what was it? These two questions were pretty fully discussed, and the members appeared to be unanimously of opinion that the symptoms were attributable to poison, and that arsenic most probably was the deleterious agent which had been administered.

Mr. H. Jackson afterwards exhibited a singular gorget, which was invented some years ago by a very eccentric surgeon, who declared that by the use of this instrument the operation of lithotomy would be rendered "*safe, easy, and agreeable*." It is not needful to describe the instrument, as it was never used even by the inventor. Mr. Jackson contrasted with it the ingenious gorget which was invented and always used by the late Mr. Stainforth, of Sheffield.

NEWCASTLE-ON-TYNE INFIRMARY.

PLEURISY WITH EFFUSION—DEATH—ABSENCE OF A KIDNEY.

(Reported by Mr. Taylor, House-Surgeon.)

Samuel Hamilton, aged twenty-four, employed at an alkali manufactory, was admitted a patient of this infirmary, under Dr. Cargill, on April 14, 1842. His complexion was dark, the face pale and anxious; he was emaciated, and had been ill and unable to work for six weeks; his principal complaint was of dyspnoea; had some pain of right side for a short period, but not acute; his intellect appears confused, and he is not able to give decided answers to questions, so that a satisfactory account of his previous symptoms cannot be obtained. He has a troublesome cough, with viscid mucous expectoration; urgent dyspnoea, which has been gradually increasing; face covered with copious perspiration; pulse 120, very small, and weak; great thirst, tongue dry; bowels costive; sense of weight in right chest, but no pain; can only lie with his body inclined to the right side; respiration very quick and laborious.

Physical Signs.—The right side of the chest measures one inch and a quarter more than the left; intercostal spaces nearly obliterated; liver rests below the level of false ribs; universal dulness on percussion, except in the infraclavicular region, where it is less so; no respiration audible anteriorly, except between third rib and clavicle, where it is very feeble and indistinct; posteriorly, bronchial respiration and bronchophony at the root of the lung; no vesicular murmur. Left side of chest: respiration in superior lobe normal; in lower lobe, accompanied by loud murmurs and sonorous râles. Ordered to be bled to sixteen ounces, and to have

Calomel, two grains;

Opium, one-eighth of a grain, every third hour.

15. No relief; profuse perspiration; panting respiration.

Calomel, three grains;

Compound kino powder, four grains; to be taken every second hour. To have some strong mercurial ointment rubbed in along the thighs every fourth hour.

Paracentesis thoracis to be performed, which was done at three o'clock in the afternoon, and three half-

pints of clear straw-colored fluid drawn off; on standing a few minutes, the fluid formed into a jelly, and was proved by the usual tests to be highly albuminous. In the evening he was something easier; respiration not so laborious or frequent; pulse improved.

16. Has been able to lie a little on the left side; pulse 120, fuller; respiration thirty-six in the minute; sputa viscid and streaked with blood; sub-crepitant râle and bronchial respiration in upper part of left lung; right side of chest remains dull on percussion, and no return of respiration; great thirst; tongue very dry; heat of skin. A large blister to the right side of the chest; bleeding to twelve ounces.

Tartar emetic, one-eighth of a grain;

Water, half an ounce. To be taken every third hour.

Continue pills and mercurial ointment.

17. Is much the same but rather weaker. To have fifty drops of tincture of opium at night. Continue other remedies.

18. No better; slept worse last night.

19. Breathes easier; cough less troublesome; pulse 108, very soft and flowing; tongue much furred; gums a little swollen; can lie better on right side; percussion clearer over sternum; no respiration audible on right side; mucous râle continues in left lung. Calomel pills to be omitted.

Continue mercurial ointment and tartar emetic draught. An opiate mixture at night.

21. Respiration continues somewhat easier, is 26 in the minute; pulse 90, and very irregular; gums more swollen and tender; perspiration still profuse.

Sesquicarbonate of ammonia, ten grains;

Water, an ounce; to be taken every third hour. To have two glasses of wine daily.

Continue the ointment.

22. Is becoming weaker; pulse continues very weak and irregular; no relief of symptoms.

23. Died at half-past seven in the evening.

A post-mortem examination was made the next morning at eleven o'clock. The body was not much wasted; no anasarca; the right pleural cavity contained one gallon and a half of clear greenish yellow fluid, which, on standing, was converted into a pretty firm jelly; the whole of the costal pleura was lined with a layer of rather firm, pale, coagulated lymph, which was deposited in greatest quantity near the sternum and pericardium; the lung was compressed into very small bulk, and lay close to the spinal column, and hidden by the pericardium; there was no lymph on its pleura, and no disease in its substance; the left pleura was quite healthy; no adhesions; the lung firmer than usual, of a dark color, crepitant, and contained some serum; the mucous membrane of the bronchial tubes much injected, and coated with reddish mucus; the large tubes contained a quantity of grey viscid mucus; the pericardium contained about one ounce of serum; the heart healthy, no blood in its cavities; the right auricle and ventricle filled with yellow coagula; the spleen very dark, and softening had taken place in its centre; the right kidney very large and lobulated; no kidney existed on the left side.

Before opening the chest a trocar was pushed into it to draw off the fluid, but none flowed, although it was tried in several places, both before and after opening the chest.

RETROSPECT OF THE MEDICAL SCIENCES.

ENGORGEMENT OF THE UTERUS.

In a pamphlet published by Dr. Clement Ollivier, of Angers, on the treatment of prolapsus uteri, he speaks strongly against the use of differently shaped pessaries, which are employed indiscriminately, without paying attention to the cause of the prolapsus, which, according to Dr. Ollivier, is nothing more than an engorgement. Thence arise the symptoms which are constantly observed, and which are attributed to any cause other than the presence of a foreign body, and its contact with a painful and inflamed surface.

M. Ollivier considers that one of the most frequent causes of this affection in young girls, with whom it is very rare, is masturbation. He says, that one of the most frequent causes of chronic engorgement of the uterus in virgins, or women who do not have any communication with men, is masturbation, which, by gradually inducing disorder in the uterine functions, gives rise at first to spasm of the organ, which affects the secretion of the menstrua; on the other hand, this excitement, if frequently repeated, finally brings on a more or less intense sanguineous congestion, which gives rise to a kind of impermeability of the uterine parenchyma, caused by a slight inflammatory affection; then the dysmenorrhœa, at a later period, becoming habitual, induces amenorrhœa, which ultimately determines more dangerous diseases. Sterility is always an inevitable result, unless the diseased state of the uterus being arrested, allows those portions of the viscus which continue healthy to perform their functions; the catamenia may then reappear, but are almost always accompanied by uterine colics; the matrix may recover its powers of conception, but during gestation a period arrives when the uterus, not being able to enlarge freely, on account of the inflammatory action it has undergone before conception, reacts upon the product it contains, and almost always determines an abortion; in this way the pregnancies of women affected with morbid conditions of the uterus almost always terminate.

Masturbation, in causing a disordered condition of the entire uterus, produces more frequently an engorgement of the body of the organ rather than of the neck, whilst an exactly contrary condition obtains in women who have connection with men. In virgins the affection of the body of the uterus is more frequently found, that of the cervix uteri more rarely.

M. Ollivier mentions, among other causes of engorgement of the uterus, the irritation of the sexual organs by primary connection, a cause of irritation of the organ the more dangerous, that it has hitherto escaped the notice of medical men, either because they do not attach sufficient importance to it, or because women conceal from them the knowledge of their illness, notwithstanding the sufferings they endure.

The dysmenorrhœa, which almost always follows abortions, is the result of an inflammatory engorgement more or less considerable, and susceptible of cure; this engorgement is the cause of the sterility that follows miscarriages. The frequency of these inflammatory engorgements observed by the vulgar has rendered abortions more dangerous in their eyes

than a delivery at the full period; when they take place during the first pregnancy, they are the more frequently to be attributed to a too great sensibility of the uterus, as yet unaccustomed to the sensations produced by coition. It is this sensibility which gives rise to consecutive inflammatory symptoms; under other circumstances this uterine sensibility causes the disorders which precede menstruation.

M. Ollivier attributes the sterility which occurs to most women in large towns, after their first and second labors, to a similar cause. The editors of the "*Journal de Medicine et de Chirurgie Pratiques*" observe, with respect to this opinion, that they agree with M. Ollivier, that the engorgement of the uterus may sometimes prevent conception, but that another cause for this pretended sterility in great towns, and Paris especially, must be sought for. Considerations of a different kind will explain the small number of children found in families, whose pecuniary means are not in just relation with their daily expenses.

MALIGNANT NASAL POLYPUS.

A man of the name of Lawson, forty-seven years of age, was admitted into the hospital, under the care of Mr. Syme, having a malignant bleeding growth from the left nostril, which protruded externally. It distended the nostril, had a brownish-red color, with soft, friable consistence, and bled under the slightest touch. The disease being regarded as malignant, and probably originating from a bony cavity, such as the æthmoidal or sphenoidal cells, which are inaccessible to the knife of the surgeon, the poor fellow was dismissed as incurable. He soon returned, however, determined to undergo any operation that might afford the slightest prospect of escape from his otherwise inevitable fate. Although the same opinion as to the nature of the disease was again expressed, the case was considered to offer some circumstances favorable for the operation, because, although the nostril was dilated, the root of the nose and nasal bones did not show the slightest appearance of enlargement; there was neither pain nor uneasy feeling in the region of the frontal sinuses; the eyes were natural as to position and vision, and the morbid growth was confined to one nostril. The disease appeared to spring from the inferior turbinated bone.

An incision was accordingly made through the upper lip, from the nostril downwards to the mouth, and the flaps were then separated on each side from the gum, so as to afford free space for examining the attachment of the tumor, which was found to grow from the septum, by a narrow neck not larger than a four-penny-piece, immediately above the connection of the cartilage to the bone. The septum was next cut through a little above the lower margin, so as not to interfere with the columna, the bone divided with pliers, and the remaining cartilaginous attachments divided. The wound was then dressed, the lips thereof being retained together by suture. The patient was soon cured, and has not had a relapse.

Mr. Syme considers that the result of this case shows how careful surgeons ought to be before they decide upon the incurability of any disease, and that it further proves the advantage of dividing the lip,

instead of cutting through the columna, or slitting up the ala, the plan he adopted affording him more space, and leaving less deformity.—*Lond. and Edin. Med. Journ.*, Sept., 1842.

THE STARCH APPARATUS FOR FRACTURES.

M. Seutin, the inventor of the starch apparatus for the treatment of fractures, has recently visited Dublin, where he has explained and demonstrated the application of his bandage. One great objection had been, that the apparatus, when once put on, remained a hard case round the limb, allowing no room for the necessary degree of tumefaction, and consequently endangering the safety of the member by inducing gangrene; and that, as the parts were hid from view, no timely warning was afforded of such accidents. As the starch bandage was used, there was much truth in this objection; as M. Seutin now uses it, the occurrence of such dangers is obviated. He first applied a calico roller, moderately firm, round the leg; no starch was put on the inside of this bandage, as it would stick in the hairs, and prove unpleasant to the skin when it hardened. After it was applied some starch was smeared along its surface; wherever pressure was wished to be avoided pledgets of soft lint were put; a soft pasteboard splint, a little starched on the inside, was then placed on each side of the leg, and then one behind, the part about the heel and the hollow of the tendo Achillis being well stuffed with lint; a pasteboard splint was also then put in front. These were secured by a bandage smeared with starch, the end of the bandage being turned down and stuck in front, so as to be easily found. More starched bandage was applied, till the whole was a firm and smooth case. This should be left for twenty-four hours; when it has become quite dry, it is then slit down along the whole front of the outside, in the space between the tibia and fibula, down to the end of the foot. When the sides of this opening are held aside, the state of the limb can be examined. If it is found to press too much on any part, a little lint can be inserted, so as to raise the apparatus from the place pressed on; should it be desirable, any part of it covering a wound, &c., can be cut away, to allow the proper dressings to be applied, and the discharge to be removed.

Long bandages are preferred wherever it is requisite to establish a regular compression, and that the lifting up of the injured part cannot entail inconvenience to the patient, sharp pain, derangement in the coaptation, &c. Short bandages are reserved for contrary cases; they are disposed generally in three planes; it is between the layer in contact with the skin and the middle layer that the pasteboard splints are generally placed; short bandages are especially employed in lesions of the pelvic extremity. The length or breadth of the bandages is proportioned to the part which ought to be covered with them. Folds should be repeated as seldom as possible, and never on bony eminences or excrescences, which should be defended by layers of wadding, lint, or some other such material, besides the bandage.

It is important to leave uncovered the ends of the fingers or toes, whose variations of color and of temperature furnish a sufficiently just measure of the analogous changes of the other parts of the limb covered by the bandage.

The compression exerted by this apparatus ought never to reach to that degree of violent constriction which practitioners, as little familiarised with M. Seutin's method as with the general principles of compression, have believed to be necessary for the resolution or prevention of inflammation. Compression, as understood by M. Seutin, ought to stop at a gentle methodical pressure, sufficient to moderate the afflux of blood, but not to stop it—a pressure which, in many circumstances, at the instant of its application, is only retentive, and which never acts on the soft parts, so as to be able to induce mortification in their tissues. The pressure should always be made to act from the extremities to the centre as evenly as possible, care being taken to avoid its immediate action on bony or tendinous prominences, excrescences, &c.

The starch apparatus dries in the course of from thirty to forty hours after its application, but its desiccation may be aided by the employment of artificial heat if needed, which, however, is better avoided if possible. Unless the patient complain of pain, or much uneasiness in the injured limb, or the surgeon entertains fears on the state of the soft parts, it would be as well to defer the section of the bandage to the second or fourth day, when, if the apparatus fulfil the views proposed, it is made secure again with a starched bandage; if it exercise too much pressure, the edges must be separated, the interval being filled up with a little softened pasteboard; the exterior surface is then to be smeared with starch, and the apparatus surrounded by a starched bandage, very little compressed. Folds and plaits that press the skin irregularly are to be removed; the pieces that exercise injurious local pressure are to be wet slightly with water; pieces of lint are to be inserted where necessary, and the whole to be surrounded by the starch bandage, care being taken to make a daily inspection to see that all is right. If the apparatus appear defective in any particular, it should be removed, having been previously wet with tepid water, and replaced by another, less objectionable.—*Dublin Journ. Med. Sci.*, Nov., 1842.

IMPERFECT LUXATION OF THE RADIUS.

Dr. Goyrand, of Aix, has published, in the “*Annales de la Chirurgie Française et Étrangère*,” two instances of a displacement of the head of the radius, not described in surgical works, but of frequent occurrence among children.

On the 9th of September a little girl, three years old, while walking on an unequal pavement, was nearly falling, when her mother caught her, and kept her up by the right hand. The child immediately screamed out, and could not use the limb; she was brought directly to M. Goyrand. The forearm was flexed to one-fourth its full extent, the hand was in pronation, and dependent, the limb motionless, and there was neither deformity nor swelling at the elbow. Any attempt to bring the hand into supination caused the child to scream. M. Goyrand took the right elbow in his left hand, pressing his thumb at the same time on the anterior face of the head of the radius, and having the child's hand in his own. He then extended the forearm, and exercising rather powerful traction, principally upon the radius, while he carried the hand in supination, then, pushing the head of the radius

backwards with the thumb, he suddenly flexed the limb, and the displacement was reduced. The pain the child was suffering from was instantly removed, and the little patient could use the hand to carry a piece of cake, which was given her to her mouth.

The second case so completely resembled this, that it is only mentioned to state that the reduction was as easy and sudden as in the preceding.

In 1837, M. Goyrand published a communication in the "*Gazette Medicale*," on this injury, from which it appears that it is an incomplete luxation of the superior extremity of the radius, forwards. It is met with only in very young children; it is observed most frequently from the age of eighteen months to three years, when falls are frequent, and to prevent them, children are caught by the hand, or else the child is lifted up by the limb to carry it over the kennel. The upper extremity, thus placed in pronation, supports the whole weight of the body; the weakness of the ligaments and muscles at that age favors the separation of the articular surfaces; a luxation does not take place, and consequently there is not an appreciable change in the shape of the elbow, but the extremity of the radius, separated at first from the small head of the humerus, from the traction exerted on the forearm, is carried forwards by the rapid contraction of the biceps, and there results a change of the articular relations sufficient to explain the appearance of the phenomena by which this injury in generally accompanied.

A significant crackling noise warns the surgeon when the articular surfaces have regained their respective positions. The pain is immediately removed, and the use of the limb is so perfectly restored, as to prevent any necessity for consecutive treatment.

CALCULUS VESICÆ.

M. Dieulafoy has published several interesting cases with respect to the shape of the calculus in the bladder, in the *Transactions of the Medical Society*, of Toulouse. He performed the lateral operation on a child, five years old, in whose bladder he previously had discovered a calculus by means of catheterism, the presence of which he also ascertained by passing the index finger into the bladder, but which he could not touch with the forceps when he had passed them into that viscus. The instrument was frequently passed into the bladder, but each time unavailingly; he found it impossible to lay hold of the calculus, the presence of which he had nevertheless fully determined by the finger and the catheter. The surgeon was very much perplexed by this, when his assistant opening the blades of the forceps to clean them, discovered a calculus, about the size of a little pea, in the midst of clotted blood in the teeth of one of the blades. During the manœuvres of the operator, the calculus had lodged in the teeth of the blades, and as it was not large enough to prevent their closing, its taking that position had not been noticed. The operation having been thus terminated, the little patient speedily recovered; M. Dieulefoy drew the conclusion, that, in every case of lithotomy, the blades of the forceps should be examined after they have been withdrawn from the bladder.

In another operation of this kind, the same surgeon, after having ascertained the presence of the calculus in the bladder, introduced the forceps several

times without being able to seize it. The blades were examined each time they were withdrawn from the bladder, but they did not contain the calculus, which was ultimately discovered in front of the incision, in a kind of cavity which opened in the membranous portion of the urethra, where its narrow and elongated form had allowed its entrance. The painful and fruitless researches which had been had recourse to, were not attended with any injurious results. In another child, scarcely two years old, although the stone could be felt with the finger, it could not be seized with the forceps in whatever direction they were inclined. The calculus was situated behind the prostate upon the trigonum of the bladder, and it was necessary to use the curved forceps to enable the operator to extract it. The calculus was perfectly round, of the size of half a franc in diameter, and exceedingly thin. M. Dieulafoy attributes all the difficulties of the operation to the peculiar shape of the calculus.

DISLOCATIONS OF THE FEMUR AND HUMERUS.

A young man, of a vigorous constitution, who was gathering mulberry leaves, fell from a height of fifteen feet by the breaking of the branch of the tree on which he was seated. The head of the femur was dislocated, and carried into the left iliac fossa, the injury being easily recognised by the shortening of the limb, the rotation of the foot and knee inwards, the impossibility of abduction, &c. The reduction was attempted by the ordinary means, but in vain, and it was effected successfully only after the lapse of a week, in the following manner:—The mattress upon which the patient was placed, was laid upon the ground; an assistant seated himself across the body of the patient, bending forwards so as to press heavily upon the pelvis, both bones of which he grasped forcibly with both hands so as to render them motionless. Then standing upright and on the inside, M. Benoit took hold of the dislocated limb himself, and after having flexed the leg upon the thigh, and the latter upon the trunk, he placed his left hand under the knee, and the right hand upon the ancle. He had in view in his movements of reduction—first, to push the thigh upon the pelvis to force the flexion a little; secondly, to draw the thigh upwards, and to effect that, whilst with the left hand he endeavoured to raise it directly, with the right he on the contrary pressed down upon the ancle, thus changing the leg into a lever of the first kind; and thirdly, to carry the leg in abduction, so as to give a movement of rotation forwards and inwards to the head of the femur. These different movements executed simultaneously, were completely successful. The reduction was almost simultaneous, and effected, without exaggeration, in a few seconds. A sudden shaking, without any noise, but readily perceived by the operator and his assistant, indicated the return of the head of the bone to its socket. There was scarcely any pain, and the patient could walk tolerably in a fortnight.

M. Benoit reduced a dislocation forwards of the humerus, in another patient, in the following manner: The patient laid in bed, had the body supported by an assistant, while Professor Serre directed the movement and held the head of the bone. M. Benoit then took hold of the wrist of the dislocated limb with one hand, and made extension so as to raise it gradually, and bring it near the patient's head, according to the

advice of Malgaigne; he then brought it down suddenly, and reduction took place instantaneously, scarcely causing any pain.

TANNIN IN UTERINE HÆMORRHAGE.

M. Dumars has published a communication in the Journal of the Society of Practical Medicine, at Montpellier, containing the detail of several cases in which he successfully employed tannin internally in the treatment of uterine hæmorrhage. A woman, twenty-five years old, three months advanced in pregnancy, while travelling in a waggon, was seized with a severe colic, which was followed by a frightful uterine hæmorrhage. A midwife plugged the vagina, and applied cold lotions to the abdomen and thighs, but without advantage; the plug was expelled. When M. Dumars arrived, the patient was in a state of complete syncope, and death approaching. He ordered pills containing two grains of tannin with a small proportion of opium, one to be taken every hour. By the time she had taken the sixth pill, she fell asleep; and when she woke three hours afterwards, the hæmorrhage had almost stopped, and had entirely ceased by the next day. The pills were continued every three hours.

In this case the tannin was given in the form of pills; but circumstances may arise during syncope in which, from the difficulty of swallowing, it may become impossible to administer it in that form. In such cases, M. Dumars prescribes it in the form of draughts or injections. Miss —, six months pregnant, was seized with violent hæmorrhage, after having experienced a severe mental emotion. When seen, she was in a very alarming condition; the abdomen was hard and tympanitic, the skin cold, face pale, the mouth wide open, pulse feeble and intermittent, and complete insensibility. The os uteri was partially dilated, and abortion was very nearly occurring; in fact, the slightest delay might prove fatal. M. Dumars ordered four scruples of tannin to be infused for ten minutes in a pint of boiling water, and then to be injected slowly into the bowels. The thighs were brought together, and kept so in a state of flexion, by means of a napkin and pillow, and warm cloths were applied all over the body, after which the following medicine was given, in the dose of a spoonful every half hour:—ninety-six scruples of water of black cherries, sixteen scruples of orange flower water, forty-eight scruples of linden water, ten grains of pure tannin, forty-eight scruples of syrup of diacodium. The medicine was administered by means of a funnel. After the lapse of three hours Miss — opened her eyes, and the pulse increased in power; some spoonful of soup were then given. On examination, the hæmorrhage was found to have nearly ceased. Twenty-four hours afterwards the patient had recovered her senses; the os uteri had closed, and the bleeding was arrested. The movements of the child were felt soon afterwards. The mother went her full time, and had a happy delivery.

MIDDLESEX HOSPITAL.

We regret to say that Mr. Mayo has been compelled, by continued ill health, to resign the surgeoncy to this hospital. Mr. Alexander Shaw, late assistant-surgeon, will probably succeed Mr. Mayo. Mr. Erasmus Wilson, and several others, are candidates for the office of assistant-surgeon.

PROMOTIONS AND APPOINTMENTS.

October 7, 1842.

57th Foot—Assistant-surgeon Frederick Hobson Clark, from the 95th, to be assistant-surgeon, vice Neville, deceased.

95th—Assistant-surgeon William Sall, from the Royal Newfoundland Companies, to be assistant-surgeon, vice Clark, appointed to the 57th.

Royal Newfoundland Companies—James Charles Martin, gent., to be assistant-surgeon, vice Sall, appointed to the 95th.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, November 11, 1842.

H. A. Arden, G. F. Hewson, H. Vidal, J. H. Kimbell, T. L. Hodson, G. Cole, A. Adye, J. P. Bourne, W. Simpson.

Gentlemen desirous of having the "*Provincial Medical Journal*," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

Dr. Binns.—We have to acknowledge the receipt of Dr. Binns' letter. In reply, we would refer Dr. Binns to the "*Athenæum*," in which he will find his "*Treatise on the Art of Procuring Sleep at Will*" estimated even somewhat more lightly than we have estimated it. Our remarks were intended neither as a review nor as a notice. The work of Dr. Binns is unworthy of criticism, and beneath notice. We cannot comply with the request of Dr. Binns to return his work to the publisher, because it is not the custom so to do; but we shall compromise the matter by appropriating his pages to domestic purposes.

J. H.—The letter from *Nottingham* should have been signed. We were unable to find the address of — Jones, Esq., Blackfriars-road.

The communication on Assurance Office Fees in our next.

Z.—The College of Surgeons have not issued any new regulations since last October; but we have every reason to believe that the published regulations of the college are not adhered to by them.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET,
CAVENDISH SQUARE, LONDON.

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COURSE OF CLINICAL LECTURES, DELIVERED AT THE MIDDLESEX HOSPITAL. BY DR. WATSON.

Lecture V.—November 12, 1842.

GENTLEMEN,—In addition to the twenty-four new patients, whose names and disorders I briefly announced at our last meeting, six more were admitted before the week closed—one woman and five men. The woman, named Mary Scannell, presents a case of abdominal tumor, somewhat obscure in its character, to which I do not purpose devoting any further observations this day. I shall take occasion to advert to it, at a length somewhat proportioned to its very interesting character, on a future occasion. Of the five males, one case, that of James Shutton, is a case of very slight febrile disturbance, scarcely to be dignified with the name of fever, and for which I trust repose and abstinence from all excitement will prove effective remedies; one, Wm. Davis, with hoarseness, aphonia, and some indistinct thoracic affection; one, Robert Penyman, with renal pains rather severe, and consequent upon some renal disorder; one, John Little, affected with acute rheumatism; and one, Solomon Sutton, whom we regarded at first, but probably erroneously, as laboring under lead colic. This man has left the house; I shall, therefore, in compliance with our plan, now address to you such observations as I have to make on his case.

He came into the hospital on Sunday evening; the Thursday before he had been seized with pains in the abdomen, so severe as to bend him double; his bowels, which up to that day, had been regular, then ceased to act; pressure on the abdomen, so far from aggravating, actually alleviated the pain. He had had active aperients and enemata administered to him, but in vain, before his entry into the hospital, and blood had been drawn very freely; indeed, I must say, lavishly, for so much as thirty ounces had been taken from him at a time. It was tolerably obvious, on his admission, that this man was laboring under colic; and as he was by trade a painter, and had been so for nine years, and had suffered, he told us, slighter attacks of colic before, it was natural to set down the case as an instance of that particular colic, known as the colica pictorum, or painters' colic. This form of the disease is the result of the slow accumulation of lead in the system, to which painters in particular are subjected, from the constant use of lead in the composition of their pigments, and the daily inbibing of numerous small particles, until the aggregate becomes large and most injurious. Why I doubt whether this case was anything more than a common stercoraceous colic, arising from a torpid state of the bowels, to

which any one of any class in life is liable, is this—his gums did not show the token of the presence of lead in his system. It is only within the last two years that this phenomenon has been attended to, and it is one to which I would direct your careful attention. In 1840, Dr. Burton communicated to the Medico-Chirurgical Society the result of his observations on cases of disease arising from the entrance of lead into the system, and on the effects produced by lead when administered for medical purposes. He directed attention to the fact, that in almost every such case, perhaps in all such cases, there was found a defined dark blue edging of the patient's gums, where the gums meet the teeth. Experience since has fully verified this observation—this dark blue edging is, I am inclined to affirm, an invariable consequence of the admission of lead into the system, and I believe it to be a sulphuret of lead. A very small quantity of lead is sufficient to cause this symptom. In one case which occurred in this hospital, the edging formed in two days, where only fifteen grains of the acetate of lead had been taken. This species of colic not infrequently occurs from residence in a newly-painted house. If you wish to see for yourselves the remarkable phenomenon attending the admission of this metal into the human system, you will look to the case of Joseph Reynolds, in Pepy's ward. On his gums you will find the blue edging very distinct, and you will find that I had administered to him three grains of the acetate of lead, with the view of arresting the hæmoptosis, of which I spoke to you, when submitting for consideration his case, among others, of phthisis, at a former meeting. It is more than probable that a quantity of lead, sufficient to produce colic, would produce this edging. I may remark that the edging is most manifest where there is much tartar on the teeth. This man's teeth were not very clean, yet there was not the slightest appearance of the discoloration; neither was there any paralysis of the wrists. Either, therefore, his is a case of common colic, independent of any action of lead on the system, or it is a case of lead colic, without the characteristic affection of the gums. To the former conclusion I lean, for were it a case of lead colic, I am strongly of opinion that the quantity of lead which caused the colic would be more than sufficient to produce, and would have produced, this blue edging of the gums. This is a point which I consider well worthy your attention, and which should be remembered; for the presence of this symptom may often decide the character of symptoms otherwise ambiguous. Lead in the system produces also pains similar to those attendant on rheumatism, and between the pains caused by lead and rheumatic pains, this symptom draws a definite line, gives an immediate distinction. Some of you, Gentlemen, saw early last year a female patient of mine, named Davis, who came into hospital with dropped wrists, and pre-

sented a very interesting case. For the satisfaction of such of you as did not see her, I may briefly mention the points in her case. She had, as I have said, dropped wrists, her hands dangling powerless, and severe pains in the limbs. I must tell you that that state of the wrists is almost peculiar to disease from lead, and from all our examination I was assured that it was a case of lead palsy. But she had, as she thought, had nothing whatever to do with lead, as women from their occupations seldom have. Her husband had not been using it, he was a broker; in short, by all our inquiries we could not ascertain any circumstances under which lead was likely to have entered her frame. She had, previous to her admission, and in the hospital, violent constipation. At last we inspected her gums, and on them we found the mark which confirmed my opinion; the blue edging was there. Then at length the secret came out; at last she remembered that her sons had been employed in painting bird-cages in her room.

With respect to the man who has just left the hospital I will not pretend to say that bleeding, in his case, was wrong. And here I may take occasion to advise you, Gentlemen, to be cautious and chary in forming an unfavorable opinion respecting the treatment adopted by others; you should not be hasty to judge and prone to condemn, when you are perfectly aware of all the circumstances under which the treatment was adopted. But in this case I fear the bleeding was carried further than was necessary; thirty ounces of blood are a very large quantity, and should not be hastily or wantonly drawn. I do not know who the medical gentleman was that directed this treatment, and I do not wish to attach blame to him, whoever he may be; but I feel it necessary to observe that I should not have considered so large an exhaustion of blood judicious or prudent. When we have got patients afflicted with colic to treat, our first and great effort must be to open the bowels, and thereby remove the matter which has accumulated, and causes at once the constipation and the pain. My colleague, Dr. Wilson, recommends the warm bath, and that a quantity of warm water should be thrown up into the bowels; this has been found very successful, and has produced great relief and copious evacuation, with great ease. Other efficacious remedies are mustard poultices and turpentine. In the first instance I have found most satisfactory results from a full dose of calomel and opium; sometimes opium alone must be used to allay the pains; after the opiate there should be exhibited a large dose of neutral salts, or castor oil, with (if the necessity should arise) the addition of croton oil. Our means of removing the affection are purgatives and anodynes. When you have got the bowels to open and act freely, the patient, at least in the early stages of such an attack, is well; and so it was in this case. The medicines operated freely, all pain and inconvenience were removed, and the patient has left the house convalescent. I shall not say anything more on the paralysis attending lead colic, until an example of it shall afford us a more fitting opportunity for comment.

Since this day week there has been no death. I have, therefore, Gentlemen, no pathological observations to address to you this day. Let us now advert for a little to the two cases of anasarca, which I ad-

mitted on Tuesday week, and to which I cursorily referred on last Saturday. The names of the patients, you remember, are Edward Sanders and Margaret Ryan, whose cases are much alike in their external phenomena, but they differ very considerably in their source.

Sanders has had, and continues to have, anasarca of the lower extremities, enlargement of the abdomen, and puffing of the face. The woman Ryan has the same symptoms.

Those external phenomena are simply the mechanical consequences of the accumulation of water in the cellular tissue and in the shut serous cavities. They are, in general, swollen, unshapely legs, pitting on pressure; prominence and fluctuation in the abdomen; and puffiness or bloated appearance of the cheeks and neck. In the two cases I refer to, those phenomena present themselves, and some years ago no difference in the nature of the two cases would have been suspected. A difference, however, does exist, and a difference of the nicest importance. To that let us direct our attention.

Edward Sanders is aged twenty-four. The anasarca in his case was of only a fortnight's duration at the time of his admission. It first made its appearance, he said, in his knees and thighs, and subsequently descended to his ancles. Its commencing in the lower extremities is to be accounted for simply by the laws of gravity—the collected water sinks by its own weight. That its descent had been at first impeded, I conjectured, and on inquiry I found the man had worn garters, which acted as a ligature to stay the descent of the accumulated water farther than the knees. So far downwards the force of gravity impelled the water; but there the ligature had intercepted and barred up the descending liquid. Two years before this attack the man had had a cough, shortness of breath, and palpitation. The cough had been attended by expectoration, and he had thrown up large quantities of blood. All these symptoms denoted the existence of some thoracic disease; and in such cases, where in males there is no tubercular disease of the lung, the strong inference is that the heart is engaged. In Sanders there was no such affection, and all the circumstances led me to think that he labored under disease of the heart. On directing attention particularly to this point, I found a diastolic bellows sound extending over a small space corresponding to the ventricle. This is a consequence of the circulation of the blood in the veins being impeded; the serum or liquid which has accumulated prevents the regurgitating of the blood; the flood-gates are closed, and that particular sound is produced. You may observe it noted in the case-book that Sanders had never had rheumatic fever. To beginners that observation may seem unimportant; but those who have had any experience know the importance of it, and so many are the cases of decided cardiac disease that have grown out of that common disorder, rheumatic fever, that it forms with me a regular and uniform subject of inquiry and investigation. Sanders had not had rheumatic fever.

With the view of showing you, Gentlemen, and in particular the less experienced among you, how very frequently disease of the heart follows and results from attacks of rheumatic fever, I shall for a few minutes

digress from the case immediately before us, and call your attention to a few instances of patients, in whose cases this observation is verified. I mentioned to you on last Saturday the case of John Dean, a phthisical patient. On examination he is found to have a systolic bruit, a systolic bellows sound in the ventricle, which indicates and is the result of organic disease of the heart. Pursuing the clue thus afforded, I ascertained that the man had twice had attacks of acute rheumatism, that is rheumatic fever—once three years ago, and again four months subsequent to his first attack. Charlotte Parrock, whose name I also brought before you at our last meeting, has palpitation, irregular pulse, and other symptoms denoting cardiac affection. She has twice had rheumatic fever—first, as she says, when she was sixteen years old, and though she dates her present ailment from the later attack, I am disposed to count its commencement from that in her early life; since which attack she admits she has been ever since more or less subject to palpitation. Charlotte Elmore is another whose name I mentioned; she, among other symptoms, complains of palpitation. Six years ago she had rheumatic fever, which laid her up for thirteen weeks. During that attack she had pains in the thorax and palpitation, which she had never had before, and to which she has been very liable ever since. Elizabeth Moore came into hospital laboring under acute rheumatism. She too has palpitation of the heart, and a catch in her left side. On inquiry I found she had had several attacks before of acute rheumatism, at various intervals of time; that she has been subject to the palpitation for years, but that it began to trouble her after the primary attack of rheumatic fever, when she was twenty-five or twenty-six years old. So that even confining ourselves to the new cases admitted, we have in them abundant illustration of the fact to which I have adverted. To those which I have named, I should, perhaps, add the case of William Balding, whose disease I am strongly led to set down as also of the rheumatic character. In further confirmation of the connection to which I have been directing attention, I may mention that, in my private practice, I have seen one clear case of acute rheumatism, in which the heart was the first part affected, and it was three or four days after that that rheumatism of the joints began.

My latter remarks have been only a digression, which I have allowed myself for the purpose of illustrating the frequent connection of cardiac disease with previous rheumatic attacks. Now to return to Sanders. The disease of the heart is sufficient to account for the dropsy. The circulation has been diminished, the return of the blood in the veins has been impeded, and hence the accumulation of liquid in the cellular tissue. This, then, is a case of cardiac dropsy. But sometimes the cardiac affection is a consequence of renal disease, and that condition is disclosed by albuminous urine. This man's urine is scanty, dark, and throws down a sediment; such urine is not generally albuminous. On applying the test of heat, as is readily and conveniently done by this apparatus,* you

perceive at first that there is an opacity and a deposit. This deposit is probably of earthy phosphate; and if the urine were tried by the nitric acid test, we should find this sediment re-dissolved. But on repeating the examination you find, first, the urine cleared, the opacity gone, and on the heat being raised to the boiling point there is no precipitation, no albumen is found, none exists in the urine; the dropsy, therefore, is purely cardiac.

The woman's, on the contrary, is a case of renal dropsy. I have already given you her name, Margaret Ryan, suffering under general anasarca, which, according to the rules of gravitation, manifested itself first in her feet. The phenomena depending on the presence of water are much the same, and she, too, has thoracic affection. Her urine, Gentlemen, is, as you perceive, rather peculiar in appearance; it is rather dark and dirty, somewhat resembling pale muddy beer, and it deposits a sort of sooty matter, which is, no doubt, formed of particles of the blood diverted from their proper destination, and changed in their appearance. On the application of heat you see it becomes quite opaque, and the test by nitric acid produces the same result—the urine is highly albuminous. This urine contains some of the serum of the blood, and is, therefore, not so acid. It is sometimes of a neutral character, and then heat will fail to detect the albumen; but the test by nitric acid will succeed. This state of the urine depends on the diseased condition of the kidneys; on that granular disorganisation, known by the name of Bright's kidney, to which I have already, in the course of those lectures, directed attention. It originates in the congestion of blood, which sometimes follows any very acute disorder, such as scarlet fever. After that disease the newly covered delicate skin is very susceptible of cold; congestion of the blood takes place; the circulation throughout the venous system is stayed or impeded; the blood becomes stagnant and unfitted for its purposes. The urea is suffered to accumulate in the blood, from which it fails to be eliminated. The action of the heart becomes sharp and noisy; the body anasarcaous; there is crepitation of the lungs; frequently there is drowsiness and great disposition to effusion on the brain, which ends by the patient becoming comatose, and so dying with apoplectic symptoms. Anasarca is sometimes the only circumstance that makes the patient feel ill. I have in recollection one instance perhaps not unworthy of relation. I was some time ago called on to visit a distiller, whom I found affected with abdominal dropsy, and in a state of alarm as to the consequence. He then feared he would die. From his former medical attendant I found he had habitually passed albuminous urine. By the treatment adopted the anasarca was reduced, and he was restored to what he considered good health. But I find he still continues to pass a quantity of albumen; he is, therefore, every day of his existence walking on the edge of a precipice. As to the causes of this kidney disease—it sometimes arises from the exposure of the person to

* In those illustrations, Dr. Watson made use of a small and handsome apparatus, contained in a portable case; the several parts and their uses he exhibited and explained. Among the instruments were a spirit lamp, glass vessels, a thermometer, an instrument for ascertaining the specific

gravity, a small bottle with a double gilt stopper, to hold nitric acid, a nest of test tools, litmus paper, &c. The case had been purchased at Bouchette's for thirty shillings; and Dr. W. expressed himself happy in bringing it under the notice of his auditors, because of its neatness, portability, utility, and cheapness.

cold and wet, when heated and perspiring freely; sometimes, as I have said, it follows scarlet fever, and consequently too much precaution cannot be used in convalescence from that disease; sometimes it comes on insidiously, and no circumstances can be remembered that favored its attack.

With regard to the mode of treatment that seems most likely to produce good results, I shall have but a few general suggestions to make. In renal dropsy, as the disease of the kidney arises from congestion of the blood, and overwork, and irritation, all stimulating diuretics must be avoided, if you can help it. In the cardiac variety diuretics are the main remedy, if you can get them to act. In the former variety, if you find you cannot give relief by purgatives and by action on the skin, you are of course driven to the alternative; you must risk further damage to the kidney, and employ those diuretics which you would, if possible, gladly avoid. In this woman's case I have sought to relieve her by medicines operating on the alimentary canal and by diuretics of a less stimulating character. Diuretics have been administered to the man with some good effect. On the whole I have more hope of affording relief in the cardiac case than, I regret to say, I can have in the case of the poor woman.

ON THE
MINUTE STRUCTURE OF THE BRAIN,
IN
THE CHIMPANZEE AND IN THE HUMAN IDIOT,
COMPARED WITH THAT OF THE PERFECT BRAIN
OF MAN; WITH SOME REFLECTIONS ON
THE CEREBRAL FUNCTIONS.

By JAMES MACARTNEY, M.D.

(From the *Transactions of the Royal Irish Academy.*)

Many years ago I discovered, with only a common pocket lens, a reticulation of fine white fibres, immediately under the surface of the cerebrum, in birds. This first led me to believe that the medullary fibres, as they are called, extended farther, and were more subdivided than had been hitherto supposed. I have since been able to demonstrate to medical students, and to several teachers of anatomy, the existence of those filaments in every part of the brain, by simply moistening the substance of the organ, during the dissection, with a solution of alum in water, which has the effect of slightly coagulating, and rendering the finer filaments visible, which, in their natural condition, are transparent. By this means, I have shown that the filaments (which I prefer to call *sentient*, instead of *white* or *medullary*) everywhere assumed a plexiform arrangement, and that the most delicate and intricate plexuses were to be found inclosed in the grey or colored substance of the brain. This fact proves the analogy between the colored substances of the brain, and the ganglia of the nervous system, in which there is a close reticulation of nervous fibres. I have long been in the habit of considering the magnitude and form of the entire brain, and of its several parts, as being merely subservient to the number, extent, and connections of the various plexuses, in which, and especially in those occupying the colored substances, I believe the sensorial powers of the brain to reside.

A chimpanzee (the pigmy of Tyson) having some months ago died in Dublin, and the dissection of it having been entrusted to Mr. Wilde, I proposed to him that I should undertake the examination of the animal's brain, in my own manner. Tyson and others had described the bulk, shape, and external appearance of the different parts of this creature's brain, but the intimate structure had never been examined by any anatomist.

I shall now lay before the academy an account of what I observed in the brain of the chimpanzee, and likewise in those of two idiots; by which it will appear that the brain in the latter possesses a still lower degree of organisation than in the former animal.

Dissection of the Brain in the Chimpanzee (Simia Troglodytes.—Lin.)

The *external form* bore so great a resemblance to the human brain, that, excepting the difference in size, the one might be mistaken for the other. The *convolutions* were as decidedly marked, and the proportions of the cerebellum to the cerebrum were exactly as in man. On the under surface of the brain I observed that the two white pea-shaped bodies, called *corpora candicantia*, were very indistinct; and they did not appear to be, as in man, the continuation of the anterior crura of the *fornix*. The *pons*, which unites the lateral lobes of the cerebellum, was, perhaps, rather flatter than in the human subject, and the fifth pair of nerves entered it, and passed for a little way distinctly, which is so remarkable in the sheep. The *pyramids* did not decussate to any extent; only two superficial bundles of fibres crossed. The *corpora olivaria* did not project distinctly, and the band which surrounds them was not observed. The structure internally of these bodies consisted of white filaments included in grey substance. The branches of the *arbor vitæ* were, perhaps, not so deep, but quite as numerous as in us. The white filaments composing the trunk were not so fine, nor so strictly interwoven, as in man, and, therefore, they were more easily distinguished. The *corpus fimbriatum* was of a long shape, and appeared to be composed chiefly of grey substance, and wanted the denticulated edge. The part called *locus niger*, in the crura of the cerebrum, was a small, greenish-grey mass, of an irregular figure, and less than a pea, instead of the crescentic form, as in man; and it did not mingle with the white fibres of the crus. The *pineal gland* was large. It was removed in making a cast of the ventricles, and lost; it was not, therefore, ascertained whether it had any calcareous matter in it or not. The parts in the lateral ventricles corresponded very nearly with the same in man. The soft *commissure* was particularly strong, and held distinct white filaments. The *linea semilunaris* was faintly marked. The two anterior of the *tubercula quadrigemina*, called *nates*, were the smaller. The *fourth ventricle* was much prolonged into the lateral lobes of the cerebellum. The *grey substance* on the floor of the ventricle was not raised into the appearance of two ganglia, and there were no *white striæ*. The sentient or white filaments formed looser or less complicated plexuses, wherever they were examined, than in man, and I could not discover any of the delicate *arborescent filaments* in the base of the *corpora striata*.

Dissection of a Female Idiot, with Extraordinary Brain.

The whole mass of the brain was small, but the front part did not recede. The *convolutions* were rather small, but sufficiently deep for the size of the brain. The *lobes of the cerebellum* were not the one-third of the usual size. The *gyri* were scarcely distinguishable, and the divisions were few and shallow. The *arbor vitæ* had but two principal branches, and the subdivisions of these were few. The anterior part of the lobes was supplied by two clusters of membranous glands, filled with red jelly or albuminous fluid, such as we find substituted for the brain in acephalous fetuses. The *corpus fimbriatum* was indistinct, wanted the denticulated margin, and the proper structure inferiorly, and was not half the proper size. The *pons* was exceedingly small, and its internal structure obscure. The *pyramids* were parallel cylindric forms, and did not appear to decussate. The *corpora olivaria* had little prominence, and the colored substance was deficient. The *locus niger* was imperfectly formed, and not of a dark color. The *corpora striata* were very small, as also the white filaments contained in them. The *pineal gland* was rather of a large size, and contained a cluster of round soft bodies, in place of the calcareous granules. In fine, the character of the whole brain was imperfect of intimate structure. The plexuses were not intricate, and the grey substances pale, and not in sufficient quantity. This person had been a patient in the Whitworth Hospital. The account I received of the state of her intellect from the house pupil was, that she was foolish, and that he could never get a rational answer from her. She was extremely ugly, with projecting jaws and teeth, and an idiotic countenance. She was an unmarried woman, but not a virgin, notwithstanding the great deficiency in her organ of amateness.

Dissection of the Brain of a Male Idiot.

The *cerebrum* was small, and the anterior lobes especially so. The *cerebellum* projected beyond the posterior lobes of the hemispheres. The *convolutions* of the cerebrum were small, particularly those of the anterior lobes on the *left side*,—they were so imperfectly developed, and so closely connected to each other, that they had more the appearance of a tuberculated than of a convoluted surface. The *olfactory nerves* were small, and very deficient in grey substance; indeed, all the colored parts of the brain were rather pale. The *pyramids* could scarcely be distinguished, being extremely small, and confounded in the projection of the *corpora olivaria*; they did not appear to decussate; the one on the left side was particularly small. The left hemisphere of the brain was smaller than the one on the right side. The *tubercula quadrigemina* were of an equal size, and a grey color on their surface. The *pineal gland* was large, semitransparent, and contained very little of the gritty matter. On the surface of the *left crus* of the cerebrum there was a green tinge observed, which, on being cut into, proved to be the *locus niger* in a disorganised and nearly dissolved state. There were no *white striæ* in the fourth ventricle. The *plexus* of white filaments at the roots of the *olfactory nerves* was very plain on the *right side*, but very imperfect on the *left*. The *brain* was tolerably firm. The *spinal*

marrow was hard, and the *cerebellum* was soft. The structure, as well as form of the parts in this brain, was imperfect throughout, but most remarkably so on the left side; the want of agreement between the two sides would necessarily impair the functions of the brain.

The first deviations from the perfect brain of man appear to be with respect to the following parts:—The *locus niger*, the *corpus fimbriatum*, the white *striæ* in the floor of the fourth ventricle, the decussation of the pyramids, the distinction of the anterior *crura* of the *fornix*, the *corpora olivaria*, the degree of intermixture of the sentient or white filaments in the *arbor vitæ*, the *corpora candicantia*, and the existence of calcareous granules in the *pineal gland*.

It is remarkable that many of these parts are not found in the first stages of fetal life, and some of them not until after birth. The *pineal gland*, according to Meckel, is not perfect until the seventh year of infancy. The same parts also first decline, and ultimately disappear in animals, according to their scale of organisation; and further, it is chiefly with respect to these parts, that varieties of structure are observed in the brains of different rational human beings. I have found many deviations from the ordinary structure in subjects, without being able to ascertain what peculiarities of character belonged to them when alive; but in one instance, of a deaf and dumb person, the *white striæ* of the fourth ventricle (with which the auditory nerves communicate) were imperfectly formed, were not subdivided, and did not unite with each other. If, therefore, we can ever arrive at correct notions of the functions of the brain, it must be by careful dissections of the interior parts of the cerebral organ, and by ascertaining the correspondence between the minute structure, and the endowments and dispositions of the different individuals; taking into account, at the same time, the influence of the various organs of the body, instead of ascribing to certain parts on the surface of the brain distinct and often opposing faculties, as Gall and Spurzheim have done.

It seems to be particularly absurd to suppose that the *cerebellum*, a part evidently as highly organised, and of as much importance as the cerebrum itself, should be designed to produce merely the sexual instinct. In animals that have the lateral lobes of the *cerebellum* very small, or who want them altogether, this instinct is stronger than in man. In those instances which are known of the absence of a part, or one lobe, or the whole *cerebellum*, no want of the venereal appetite existed; and a case is related of a person in whom the sexual desire was so ungovernable, that mechanic restraint became necessary; and it was found, after death, that both lobes of the *cerebellum* were wanting in this person. In animals that propagate only at particular seasons of the year, the testicles and ovaries are singularly developed at those periods, and afterwards decline, while at the same time no change takes place in the *cerebellum*. The abolition of the sexual instinct, by the extirpation of the testes, or of the ovaries, puts it beyond all doubt that this impulse does not originate in any part of the brain.

It would appear that all instincts depend upon the condition and state of feeling in those organs with the

functions of which they are immediately connected; thus, the maternal instinct (at least in mammiferous animals) is in a great measure the result of the tension of the mammary glands. As soon as this is removed, by the absorbents carrying off the milk, quadrupeds lose all care and anxiety about their young. The cerebral organ would, perhaps, of all others, be the most unfit for the generation of instincts. The brain is destined to direct or control instinctive feelings, and therefore it cannot create them. If a person attempt to command any instinctive impulse to be felt, he will find it as impossible to do as to rise from his chair merely by willing it, without the aid of the muscles.

I have ascertained and demonstrated, by repeated dissections, that all the plexuses of the brain are continuous with each other; that no part of the nervous system is isolated; and consequently the different parts must exercise a mutual influence on each other. I have proved that the spinal nerves, as well as those of the brain, are not inserted in the same way as the roots of plants penetrate the earth, which has been heretofore believed, but that they are united with the parts from which they are supposed to arise, and that the spinal nerves form a chain of communication with each other, after they enter the spinal marrow. It is in consequence of the integrity of the whole nervous system, that the various sympathies, both natural and morbid, exist between the different organs of the body. If the continuity of the sentient or nervous filaments were to be intercepted at any one place, their functions would be arrested at that point, in the same manner as the division of a nerve destroys sensation and voluntary motion in the parts to which the nerve is sent.

Some anatomists, it is true, have supposed that the various reticulations of the nerves, and the intermixture of the filaments of the brain, were merely to bring them into contact, and that there was no incorporation of the sentient substances. This opinion is consequent upon another, as ill supported by facts—namely, that there is a subtle or nervous fluid, which carries impressions made on the nerves to the brain, and thus causes sensation; and that the same fluid, proceeding from the brain to the muscles, produces voluntary motions. It has never been, however, attempted to explain how this imaginary fluid could become the instrument of sensation or volition, more than the sentient substance itself. For my part, I am satisfied with the knowledge of the undoubted fact, that the peculiar matter which exists in the nerves, and the white filaments of the brain, is endowed with the *power of feeling*—a power perfectly distinct from every other in nature; and I think it is equally obvious that the various modifications of sensorial function we observe are the result, and require for their production the multitude of subdivisions and reunions that take place in the sentient filaments of the brain and nerves. Voluntary motion appears to me to be the natural consequence of the connection between the central part of the nervous system, and the muscles which move in obedience to the will or desire of the individual.

DIAGNOSIS OF ENGLISH AND INDIAN CHOLERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—With your permission I shall not hesitate to prolong a discussion on the diagnosis of the Asiatic and English cholera; because, although many symptoms are common to both, inasmuch as the brain in both cases is affected, yet, as far as my observations have gone (in the Liverpool and Manchester Cholera Hospitals and at Retford), they are different complaints; and because a correct description of the pathognomonic symptoms must be a very difficult undertaking—the one kind apparently attacking the brain, and producing secondary affections of the viscera; the other beginning in the viscera, and producing consequences which in time affect the sensorium secondarily, from exhaustion.

If I were to indulge in any conjectures, I should say that the first impression of the Indian cholera being directly on the sensorium, the function of the lungs is consequently impaired so far as almost to prevent the oxygenation of the blood; the liver and kidney secretions become nearly, if not entirely, arrested; and general enervation, prostration of strength, and violent cramps succeed. As far as I saw, the suddenness of the effect on the system was the rule, and not the exception; and in some cases the impression was so great as to destroy vitality within a few hours. The first effect of the English cholera, being on the chylopoetic viscera, produces exhaustion, extending to the brain and arresting some glandular secretions, although that from the mucous membrane of the intestines may be increased. But leaving speculative theories to proceed to practical observations—

The Indian cholera visited Retford in July, 1832, during still, cloudy, hazy weather; it occurred in a damp situation near a Carr, and in closely-confined houses, having doors and windows which opened in the front part only. There was one privy common to each twelve houses; fifty-two cases were reported by the “board of health” from these twenty-four houses in a short space of time, several members having been attacked in some families and all having escaped in others. Two of five nurses died. After one fine, dry, sunny day, we had not a single additional patient.

CASE I.—The wife of William Harrison, who now lives in Sutton’s-row, Retford, enjoyed her usual good state of health until one morning about eight o’clock, when she became suddenly affected with giddiness in her head, and she fainted. On recovering, she attempted to walk home (a few hundred yards), but fell senseless in the street, and vomited; in half an hour afterwards I found her with a full pulse and violent abdominal pains, and with a remarkably blue skin. On opening a vein, and rubbing the arm, three or four ounces of blood, like treacle, were slowly expelled into a basin. At seven, p.m., she died.

It is unusual for all the distinguishing symptoms to occur in one individual; and in this instance we had only the suddenness and violence of the attack, the appearance of the skin, and the state of the blood; but these symptoms were well-marked. The difficulty

is, doubtless, to distinguish between a mild case of the Indian and a severe case of the English cholera.

In the first stage of Asiatic cholera, or the state of collapse, the general aspect is altered—the body contracted (a man appears to be altogether a smaller man than he was before the attack); the countenance and the eye have lost their expression; the manner is peculiarly piteous and imploring; the voice is husky, with an odd whine; the patient appears altogether helpless; the liver and kidney secretions are arrested, and that of the intestinal canal altered; there is an almost constant oozing of (apparently) serum from the anus; and, whenever I tried it, five grains of calomel taken every four hours had no effect; it was not absorbed, nor did it act on the bowels as a purge. In the second stage, or state of reaction of those patients who recover, they appear, first, feverish; next, the liver begins to furnish unhealthy bile (the first improved appearance in the motions is a dark and afterwards a green color); then the excessive thirst abates, and they begin to take nourishment, to pass urine, and to improve in every respect.

The sign most to be depended upon when a child is attacked, is a blue ring round the sunken eyelids.

Although I may have failed to define the pathognomonic appearances, yet they constitute an alteration from the natural aspect, manner, and voice, which alterations, when once seen, cannot be easily either mistaken for anything else or forgotten.

In the English cholera, though a patient may be upwards of sixty hours without passing any urine, the symptoms and general appearances are very different from those of the Indian cholera.

CASE II.—August 23, 1842.—I was desired to see William Roe, cowkeeper, Babworth, near Retford, who had been affected during the last three days with purging. His skin was cold and dark-colored; his eyelids appeared sunken; his pulse was 60, indistinct; he had frequent vomitings and purgings of a fluid, like thin gruel, without either color or smell; was restless on his bed, as if from exhaustion; his toes, though flexed, yet were permanently drawn upwards and backwards; he had violent cramps in his legs and abdominal muscles; had not passed any urine during the preceding night nor that day; and he was constantly asking in a low, hoarse voice for water. He had opium and stimuli, and turpentine frictions.

24. I had a message from him; "he had not passed any urine, but was rather better."

25. Visited him; found him still stronger, and he had passed (at twice) three or four ounces of urine.

27. Found him recovering.

This man had been working in the harvest field; drinking new ale several days (from the mash-tub); and he had been exposed in sultry weather (under a hedge or a tree) to occasional heavy showers. There was not any appearance in the general aspect, manner, or voice, of the Indian cholera.

I am, Gentlemen,

Yours, &c.,

W. ALLISON.

Retford, Nov. 12, 1842.

CEREBRAL AFFECTION SUPERVENING ON SCARLATINA.

By JONATHAN TOOGOOD, Esq.,

Senior Surgeon to the Bridgwater Infirmary.

I am induced to send the following case, which may perhaps be worth a place in the Journal at a time when scarlet fever so generally prevails. I regret very much that the state of the urine was not carefully noted at the time, which would have rendered the case much more interesting:—

A boy, aged eleven, had scarlatina mildly, on the decline of which he took several doses of purgative medicine. Three weeks after, he was affected with slight anasarca of the face, swelling about the throat and left ear, for which he was ordered fomentations and a dose of calomel, which operated freely; but during the whole of that day he was sick, vomited several times, and complained of headache. On the following morning the pain in the head was much increased, his vision became very indistinct, and he was comatose. His pulse was slow, soft, and languid, and he was observed occasionally to be affected with spasmodic twitches. Local bleeding and cold applications were directed. Four hours afterwards the coma had much increased, he became quite flexed, and had a violent convulsion. At this time the pulse was small, slow, and languid. He was bled from the arm to ten ounces, the head shaved, and a dozen leeches applied. He had no other convulsion, but the pain in the head still continuing, and the blood being much buffed and cupped, six ounces more were taken at the expiration of five hours. During both bleedings, the pulse rose both in strength and frequency. Cold applications were constantly applied to the head, and two grains of calomel directed every three hours. On the following morning he was quite sensible, the sight was restored, but he still complained of some pain in the head; this was completely removed by local bleeding and purgatives, and he recovered entirely in a few days.

ACEPHALOUS FŒTUS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If the following particulars relative to an acephalous child should be considered sufficiently interesting, I beg you will give them insertion in the "Provincial Medical Journal."

Yours obediently,

JOHN WICKENS WEST.

Poole, Oct. 29, 1842.

On the 25th instant I was sent for to attend a woman of the name of Rigless, aged forty-seven, in labor with her tenth child. In all her previous confinements she employed a midwife, and gave birth to nine living children, all well formed. In the early part of her last pregnancy she experienced a severe fright, and was consequently under great apprehension that all would not go on well with her; she, therefore, was anxious to employ a medical man. Until ten days previous to her labor, she felt the movements of the child, but since then they ceased altogether. On the night of the 25th she was taken in labor, and I was

summoned soon after. On my first examination I found the os uteri dilated to the size of a shilling, the membranes entire, and a soft dilatable mass presenting, more like the breast than any other part of the fœtus. The pains were regular, and in about twenty minutes the os uteri became fully dilated, the membranes were ruptured during a pain, and an unusual quantity of liquor amnii escaped. I again examined, and found the same soft dilatable tumor presenting, but discovered, on further examination, the right ear opposed to the side of the pelvis, which immediately convinced me of the nature of the presentation, although I could not feel the parietal bones, or, indeed, any of the bones of the head. The child was born without any difficulty, and proved to be a full-sized one, of the male sex, but acephalous, and did not manifest any signs of life. The integuments of the face and head were naturally developed, as were the eyes, nose, and mouth; but the whole was easily compressible into a very small compass, being destitute of the ordinary bony formation. I was not permitted to examine the child, but am convinced in my own mind that it was perfectly destitute of brain, and bearing some analogy to a case related in the "Medical Gazette," January 26, 1833, of an infant totally destitute of brain, cerebellum, or medulla oblongata. In that case there were unequivocal signs of life for the space of eleven days, such as moving the limbs, breathing, and crying; but in the one I have related life was extinct.

REMARKS.

In most cases where monstrosity occurs, there is a disposition on the part of the uterus to expel its contents during the early stages of gestation; but in the case of the acephaloid fœtus there appears to be an exception, showing, as Dr. Ramsbotham has stated, "that the brain is not essential to our being whilst in utero, for many of these children have arrived at the full intra-uterine size—nay, some are actually larger than the ordinary fœtus, as if nature had intended to compensate for the loss of the brain in allowing an exuberant growth in the body." In the present instance the woman had arrived at her full period, and had had, until ten days previous, unequivocal signs of the child being alive. She was so impressed with the idea, since her alarm, that she should have a severe labor, that, on being informed of the defects of the child, she said she was persuaded that something of the kind would prove to be the case. We have no satisfactory proof that deficiency of parts exists from the first development of the fœtus in utero, and the only reason that can be assigned for nature's deviation from the right course is, the effects that particular and sudden impressions on the mind produce during the early stages of gestation. We have many well authenticated cases on record where children have been born with various deficiencies—such as an arm or leg with a perfect stump, caused, as I recollect an instance that occurred in the practice of my father some years since, by a woman being suddenly alarmed by a man soliciting alms, and holding up the stump of his leg. The woman being then in the early stages of pregnancy, afterwards gave birth to a child with a perfect stump.

* * * We fear that Mr. West has mistaken the *post hoc* for the *propter hoc*. His theory is utterly untenable.—EDS.

EFFECTS OF THE TARTAR EMETIC OINTMENT ON THE SCROTUM.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The publication of the letter in your last week's Journal, from Mr. Griffith, of Oswestry, on a curious effect of tartar emetic ointment, has induced me to send you a short history of the following case, which occurred in my practice a few months since.

J. D., aged thirty-six, was ordered to use the tartar emetic ointment, for chronic swelling of the knee-joint after rheumatism, and told it would produce a crop of painful pustules, which after a few days appeared on the inner side of the knee; I then ordered him to continue the application on the outer side; this he did, and, much to my surprise, it produced a severe effect upon the scrotum, which assumed quite a confluent character. I directly charged him with having applied the ointment, or his unwashed hands, to the part, but he declared he had not, and begged for something to relieve his suffering, which he stated to be ten times worse than the pain from a blister; fomentations, poultices, &c., were successfully applied. The patient was of a spare habit, and had his scrotum much relaxed by confinement to bed, which probably rendered it more susceptible of the action of the ointment; but whether it was carried to that organ by absorption, or was brought in immediate contact with it by means of his shirt, which frequently touched his knee and scrotum alternately, and possibly gathered enough to affect the latter, I am still at a loss to know, though I am inclined to think there was direct contact with the ointment. Last month I saw a similar affection on the scrotum of a lad fifteen years of age, whose mother had been rubbing croton oil over the abdomen, and had carefully avoided all other parts.

I am, Gentlemen,

You obedient servant,

JOHN B. PITT, M.R.C.S.

Mattishall, Norfolk, Nov. 15, 1842.

MICROSCOPIC RESEARCHES ON SOFTENING THE BRAIN.

By Professor GLUGE, of Brussels.

The brain is composed, as every one knows, of white and grey substances. The white or medullary substance, when viewed under a magnifying power of 250 diameters, appears to be composed of white, cylindrical, uninterrupted, and elastic corpuscles, which, in virtue of their elasticity, contain nuclei of about the 1-2700th part of an inch in diameter. It seems probable that the cylindrical corpuscles are true canals, the intervals between which are filled with networks of extremely fine cellular membrane. The cortical substance is supported by the same network, and contains similar but still smaller canals, which are mixed up with spherical corpusculi.

Having thus briefly noticed the microscopic characters of the nervous tissue, the author passes to softening of the brain, which he distinguishes, according to the color, into—1, a yellowish red; and 2, a perfect white. The softening sometimes occupied the white or grey substances exclusively, but in most

cases both. The author has observed softening of a considerable portion of the cerebrum and cerebellum, pons, walls of the ventricles, &c., but not of the spinal marrow; the disease was never general, and hence the states of the affected and sound parts could always be compared together. The degree of consistence of the softened parts varied much, as did also the color, from white and grey to light red, red, and yellow, the latter being the most frequent. The author next gives the results of his researches in a series of cases of softening of the brain.

CASE I.—Female; paralysis. Pultaceous softening of several points of the cerebrum and cerebellum, both in the grey and white substances. *Microscopic Appearances*: The nervous canals were broken up into fragments, but not changed in appearance; these fragments were mixed up with spherical, opaque corpuscles, ten times larger than pus globules, and enveloped by numerous small globules, which were easily separated by slight pressure; the latter were spherical and transparent. When the scalpel was dipped into the softened mass, the drops which fell from it contained a great number of the above-mentioned corpuscles, mixed with fragments of nerve tubes. The healthy portions of the brain did not contain a trace of them.

CASE II.—Male. Cerebral symptoms without paralysis; softening to the extent of a few inches of the anterior lobe of the cerebrum. The softened mass contained a few fragments of nerve tubes with a great number of the globules already mentioned, agglomerated together.

CASE III.—Female; apoplexy; paralysis of left side; recent attack within fourteen days. Extensive softening of the right hemisphere, which was of a mixed red and grey color; left hemisphere injected, but of natural consistency; apoplectic clots in both, and a reddish-colored fluid in both ventricles. The latter contained agglomerated globules and fragments of nerve tubes; and the coagulated blood enclosed similar fragments. An enormous number of agglomerated globules were found in the substance of the right hemisphere, and but very few on the left side. Nerve tubes could not be discovered in the coagula.

CASE IV.—Male. Paralysis of the left side for several months; red softening of the hemisphere; great congestion of the capillary membrane; the nervous tubes are shrunk or not easily discovered, and only small fragments of them can be found in the softened portions of the brain; in the remainder they are unchanged. The agglomerated globules exist in great quantity in the white and grey softened parts.

CASE V.—Female. Sudden attack four weeks before death. Paralysis of right side and contraction of limbs; effusion of blood into and softening of right ventricle. The softened mass contained nothing but fragments of nerve tubes, mixed with a great number of agglomerated globules in the white and grey substance; the capillary network round the softened parts was deeply injected.

CASE VI.—Male. Constant delirium; excessive sensitiveness of the skin; contraction of right arm; no paralysis; deep red softening of right hemisphere; some straw-colored fluid in left ventricle; upper surface of corpus striatum softened; white softening of

pons and corpus callosum; grey red softening in the cerebellum. The fluid of the ventricles contained some blood corpuscles and agglomerated globules. In the portions of nervous substance affected with white softening were some fragments of nerve tubes, which were scarcely recognisable, and some globules, an immense quantity of which existed in the red softened parts. In the middle of the cerebellum was a softened gelatinous spot, about the size of a half-penny; here the nervous tubes were easily distinguished with several agglomerated globules and numerous pus globules, from the admixture of which arose the gelatinous appearance.

CASE VII.—Female; forty years. Had an apoplectic attack six weeks previously; paralysis of left side. The posterior portion of the right hemisphere exhibited every gradation of red softening up to yellow points, but the softened parts were not diffuent; in a small portion there was white softening, without any change of color whatever. In this part the nerve canals were collected into bundles and shortened, and a white amorphous substance was interposed between the fragments of the tubes; no trace of agglomerated globules, which, on the contrary, were numerous in the points of red softening. Here the tubes had either disappeared or were reduced to mere striæ; the yellow points looked under the microscope like masses of fat globules.

CASE VIII.—The patient had complained for a long time of headache, stupor, and creeping sensations in the limbs; cavities in the hemispheres and pons lined with a species of reddish membrane. The surrounding nervous substance was softened, and here was a large quantity of agglomerated globules.

CASE IX.—Fall from a height; fracture of skull; death. Effusion of blood at the base of the cerebellum, in both ventricles and in various parts of brain; pultaceous softening of several points, with fragments of nerve tubes, but no trace of agglomerated globules; fragments of the tubes and of the cellular network in the coagula. This case furnishes an example of mechanical softening from effusion of blood.

CASE X.—Apoplectic softening, without any product of inflammation. Numerous fragments of lacerated cellular network and unaltered nerve tubes in the apoplectic cell, and no trace of globules in the softened mass around it.

CASE XI.—Girl sixteen years old; apoplectic clot in the pons; death on the day of attack; the patient had merely complained of headache. Throughout the medullary substance the network of fine cellular tissue strongly injected; in the coagula lacerated nerve tubes.—*Ostr. Med. Week.*, Jan. 22, 1842.

INOCULATION OF THE MEASLES.

By Dr. M. VON KATONA, of Hungary.

During a very extensive and fatal epidemic of measles, which prevailed during the course of last winter, I had recourse to inoculation of the disease in 1,112 cases, and succeeded in communicating to the persons, thus inoculated, a mild and harmless form of the complaint.

Dr. Home, of Edinburgh, was the first (in the year 1758) who inoculated the measles with success, and

his experiments were confirmed in the clearest manner by Speranza, at Mailand, in the year 1822; yet many still doubt the truth of the fact, and refuse to have recourse to inoculation even during fatal epidemics. Very numerous observations enable me to confirm the results obtained by Home and Speranza; in 7 per cent. of the cases the inoculation failed, but the remainder took the disease, which ran its course in a very mild manner, strikingly different from the disease as it prevailed at the time. In no instance was the disease thus communicated fatal. The inoculation was performed in the same way as for small-pox, by taking some fluid, mixed with blood, from underneath the efflorescence. A red areola formed round the point of insertion and then gradually declined. About the seventh day, fever and the usual premonitory symptoms of measles set in; on the ninth or tenth day after inoculation, the eruption appeared and ran its usual course, but in a very mild manner. On the fourteenth day the fever commonly declined, and on the seventeenth (or seven to eight days after the eruption) the patients were convalescent.—*Ostr. Med. Wochenschrift*, No. 29, July 16, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, NOVEMBER 26, 1842.

Mr. Chadwick's report on the sanatory condition of the laboring classes contains an interesting chapter on the comparative chances of life in different classes of the community. We can readily understand that the various causes of sickness and mortality which prevail throughout the kingdom act with increased force upon the poorer orders, or are exclusively exercised upon them. The evil effects resulting from want of pure air, neglect of cleanliness, and inattention to various circumstances which predispose to or directly excite disease, are admitted as a general truth; but nowhere has the influence of these causes been so clearly and effectively demonstrated as in the report of Mr. Chadwick. Death, it has been said, is no respecter of persons, and the adage of the Roman poet, "Pallida mors equâ pulsat pede," &c., is familiar to us all; but death is like a dun; he knocks four times as often at the poor man's door as he does at the rich man's. The average duration of the poor man's life in a crowded, dirty court, may be *fifteen* years; while that of the rich man, who dwells in the neighbouring square, may be *sixty* years. The one class disappears from a scene of misery and privation before the other has arrived at manhood.

The returns, from which Mr. Chadwick has derived his conclusions, appear to have been collected with as much accuracy as the nature of the inquiries admitted, and were generally corrected by local investigation of facts. They lead to conclusions of the most painful nature, mitigated solely by the reflection that

the causes which determine such a sacrifice of human life are, in a great measure, under the control of wisely directed legislative enactments.

At what period, whether near or remote, the attention of our Government will be seriously directed to this question, we cannot pretend to determine. It is one of pressing and vast importance; yet, while public clamor is raised against the destruction of a handful of barbarians, some three or four thousand miles removed from us, the loss of 80,000 of our countrymen, annually swept off by diseases, the great proportion of which are proved to be preventible, is unheeded, or treated with disregard.

The average duration of human life in different classes of the community has been determined, for various localities, by Mr. Chadwick; the following are amongst the most striking examples. Dr. Barham collected and arranged returns with respect to all persons who died in Truro from July 1, 1837, to December 31, 1840. The sum and analysis of the several returns give the following results:—

No. of Deaths.	Average Age of Deceased.
33 Professional persons or gentry, and their families	40 years.
138 Persons in trade, or similarly circumstanced, and their families	33
447 Laborers, artisans, and others similarly circumstanced, and their families	28

In Derby the average duration of life may be thus expressed:—

No. of Deaths.	Average Age of Deceased.
10 Professional persons or gentry	49 years.
125 Tradesmen	38
752 Laborers and artisans	21

The above figures represent the chances of life amongst the manufacturing population of districts which are not placed under extremely unfavorable sanatory conditions. Still the effects of crowding, neglect of cleanliness, improvidence, intemperance, &c., are manifest, and may be more clearly shown by comparing the average length of life in these districts with a less crowded rural population, where the dwellings of the poor are more comfortable, and where habits of sobriety and steady industry contribute, in no small degree, to improve the sanatory condition of the working classes. Let us compare, for example, the town of Manchester with the county of Rutland.

Average Age at Death.
In Manchester. In Rutlandshire.

Professional persons, gentry, and their families	38 52
Tradesmen and their families	20 41
Mechanics, laborers, and their families	17 38

Thus it appears—and it were well if the fact were

extensively made known to the higher orders—that the health of the upper classes of society is materially affected by the causes which operate so fatally on their poorer brethren. The life of the wealthy cotton-spinner of Manchester lasts only thirty-eight years, while the existence of the Rutland country gentlemen is prolonged for more than half a century; the span of the Manchester tradesman's life is about one-half as short as that of the Rutland farmer; and the poorest agricultural labourer may expect to attain the middle age of existence, while race after race of mechanics disappear during boyhood. We have not selected Manchester from any peculiarity in the sanatory condition of its population. As the causes of disease and death are general among certain classes of society, so are their effects. In the manufacturing district of Bolton, for example, the proportions of deaths for the several classes during the year 1839 were—

No. of Deaths.	Average Age at Death.
103 Gentry, professional persons, and their families	34 years.
384 Tradesmen and their families	23
2,232 Mechanics, servants, labourers	18

It may be interesting to compare the average duration of life in the Bethnal-green district, where the manufactory is chiefly domestic, with that of Manchester and other towns where the mechanics are employed in large establishments. The comparison is favorable to the manufactories; the sickness and mortality amongst factory children are less than amongst children employed in the damp and dirty hovels of the labouring classes.

Bethnal Green.

No. of Deaths.	Average Age at Death.
101 Gentry, professional men, and their families	45 years.
273 Tradesmen and their families	26
1,258 Mechanics, labourers, &c.	16

Although Whitechapel has generally been considered as a very unhealthy district, the sanatory condition of the poorer class is much superior to that of the same class in Bethnal-green.

Whitechapel Union.

No. of Deaths.	Average Age at Death.
37 Gentry, professional men, and their families	45 years.
387 Tradesmen and their families	27
1,762 Mechanics, servants, labourers, &c.	22

The average duration of life in parts of the metropolis more favorably situated may be estimated by the return from the Strand and Kensington unions. For the upper and middle classes of society the difference is trifling; for the lower class the average duration in the Strand union was twenty-four years; in the Kensington, twenty-six years.

The preceding facts indicate, more forcibly than any

language could depict, the condition to which the laboring population of this country has been reduced, in part by the artificial influences connected with our commercial prosperity, but mainly by causes of an obvious nature, and admitting of simple remedies. The operation of these causes has been clearly traced in Liverpool, where the sanatory condition of the laboring classes occupies the lowest point in the scale, where, according to the report of Dr. Duncan, 40,000 of the population live in cellars, and where one individual in twenty-five is annually attacked by fever.

Liverpool, 1840.

No. of Deaths.	Average Age at Death.
137 Gentry and professional persons, &c.	35 years.
1,738 Tradesmen and their families	22
5,597 Laborers, mechanics, &c.	15

In Bath, on the contrary, where (according to the report of the Rev. Mr. Elwin) "the houses are large, the streets broad, the squares spacious, the crescents built upon the brows of hills without a single obstruction to the pure air of heaven," we have a healthy condition approaching very nearly to that of the most favored amongst the agricultural districts.

Bath, 1840.

No. of Deaths.	Average Age at Death.
146 Gentlemen, professional men, &c.	55 years.
244 Tradesmen, &c.	37
896 Mechanics, laborers, &c.	25

The influences of locality are thus aptly alluded to by the reverend reporter:—

"Whatever influence occupation and other circumstances may have upon mortality, no one can inspect the registers without being struck by the deteriorated value of life in inferior localities, even where the inhabitants were the same in condition with those who lived longer in better situations. The average age of death among the gentlemen was as high as 60, till I came, at the conclusion, to a small but damp district, in which numerous cases of fever brought down the average to 54. So again with the shopkeepers, the average was reduced two by the returns from streets which, though inhabited by respectable men, were narrow in front and shut in at the back. The average among the laborers was greatly diminished by the returns from some notorious courts, and raised again in a still higher proportion by districts which appertained rather to the country than the town. Of three cases of centenarians, one of whom had attained the vast age of 106, two belonged to this favored situation. Not but that great ages were to be found in the worst parts as in the best, or that particular streets did not in a measure run counter to the rule. Still, wherever I brought into opposition districts of considerable extent, I found the law more or less to obtain.

The deaths from fever and contagious diseases I found to be almost exclusively confined to the worst parts of the town. An epidemic small-pox raged at the end of the year 1837, and carried off upwards of 300 persons; yet of all this number I do not think there was a single gentleman, and not above two or

three tradesmen. The residences of the laboring classes were pretty equally visited, disease showing here and there a predilection for particular spots, and settling with full virulence in Avon-street and its offsets. I went through the registers from the commencement, and observed that, whatever contagious or epidemic diseases prevailed—fever, small-pox, influenza—this was the scene of its principal ravages; and it is the very place of which every person acquainted with Bath would have predicted this result. Everything vile and offensive is congregated there.

I think these facts supply us with important conclusions. Whether we compare one part of Bath with another, or Bath with other towns, we find health rising in proportion to the improvement of the residences; we find morality, in at least a great measure, following the same law, and both these inestimable blessings within the reach of the legislature to secure. When viewed in this light, these investigations, so often distressing and disgusting, acquire dignity and importance."

The facts which we have thus stated from Mr. Chadwick's report require from us little or no comment. From the immense loss of human life which takes place every year under the influence of causes that are in a great measure susceptible of being removed, the average duration of life, amongst the poorer orders of society, is reduced by one half. Man, it is said, can neither add a cubit to his stature nor a day to his existence; but if he cannot add, he can take off, which comes nearly to the same thing. It is, therefore, the duty, not so much of the medical man as of the statesman, to inquire how it occurs that the thread of life is thus untimely cut asunder, and to correct, if in him lie, that fatal apathy which closes its eyes while nations are committing suicide.

REVIEWS.

The Bengal Dispensatory, and Companion to the Pharmacopœia. By W. B. O'SHAUGHNESSY, M.D. London: Allen and Co., 1842. 8vo. pp. 794.

The different extracts which we have published from this work having excited much attention towards it, and many inquiries having been made for it in London, we take an early opportunity of stating that it is now on sale at Messrs. Allen and Co., Leadenhall-street. The "Bengal Dispensatory" affords, in a condensed and convenient form, full information on the materia medica of the East. To the medical student in Bengal it is indispensable, and the junior medical officers employed in that country will find it a most useful guide.

ACADEMY OF SCIENCES, PARIS.

November 14, 1842.

DISEASES OF THE BREAST.

M. Tanchou forwarded a letter on the treatment of tumors of the breast, with the object of preventing their degeneration into cancer. According to the author, tumors of the female breast increase with the

progress of civilisation. Thus, in the department of the Seine, during the year 1830, 668 persons died of cancer; in 1840, no less than 889, being an increase of from 1.96 to 2.40 per cent. on the total mortality during that period of 382,851 individuals. In Paris the number of deaths from cancer in 1830 was 595; in 1840, 779, giving a mortality of 2.54 per cent. on the deaths; while in the rest of the department the deaths were—in 1830, 73; in 1840, 110; or 1.63 of the total number.

M. Tanchou proposed various means for arresting the progress of tumors of the breast. He speaks strongly against excision and the use of caustic substances. Amongst other means he proposes pressure, together with the use of the following substances, which are applied in little bags:—Ioduret of potassium, five parts; powdered sponge, ten ditto; hydrochlorate of ammonia, forty ditto; hydrochlorate of sodium, ten ditto; or a powder composed of powdered sponge, twenty parts; nitrate of potass, one ditto; Florence iris, one ditto. Thirty patients were treated in this manner, and all seemed to be very considerably improved. In some cases the mammary gland disappeared altogether; in most only a remnant of it was left, although several of the patients had been advised to undergo an operation before the treatment had been commenced; it was not found necessary to have recourse to the knife in any instance.

LACTUCARIUM.

M. Aubergies addressed a portion of memoir on the cultivation and medical properties of lactucarium. Having called to mind the experiments of Cox, Duncan, and Bidault de Villiers, with this remedy, the author shows that its medicinal properties reside in the bitter juice which exudes from the divided stalks of the plant, and not in the extract, which is of little value. But it is very difficult to obtain the juice in sufficient quantity; hence the author was induced to make various experiments, the results of which he communicates. Several varieties of the *lactuca*—as the *stricta*, *acuminata et longata* of South America—contain no bitter principle, and possess no calming property. But the *l. altissima*, the stalks of which, through cultivation, will reach to a height of nine feet, with an inch and a half in diameter, presents the most favorable conditions for collecting the juice. On escaping through the incisions, the juice is of the color and consistence of cream, but soon coagulates and turns to yellow, and then to brown. It dries quickly and loses 71 per cent. of its weight.

On analysing the juice, it was found to be composed of a variety of substances, the most important of which was a bitter vegetable principle, regarded by the author as bearing the same relation to lactucarium that morphine does to opium; it is, however, neutral, while morphine is alkaline. This bitter principle is nearly insoluble in cold, more soluble in warm, water; it separates, on cooling, into pearly spangles, like those of boracic acid; it is soluble in alcohol, but not at all so in ether; when heated, it becomes carbonised without volatilisation. The solution is altered by alkalis, and the bitterness disappears and is not restored by acids.

The slight solubility of this bitter principle in cold water shows that it cannot exist in solution, in the juice obtained from the plant by pressure, and it seems

probable that what little is contained in that juice becomes altered during evaporation. The clinical experiments made by M. Bertrand, college of the author in the medical school at Clermont-Ferrand, prove that this preparation is possessed of calming properties in a very high degree.

ACADEMY OF MEDICINE.

November 15, 1842.

TREATMENT OF RHEUMATISM BY THE SULPHATE OF QUININE.

M. Briquet read a memoir on this subject. Twenty-three patients laboring under acute rheumatism were submitted to the mode of treatment described; nineteen in his own wards, three in the wards of his colleagues, and one in private practice; they were not selected cases.

During the first day of treatment the patients took (according to sex, age, constitution, &c.) from four to five, or six, scruples of sulphate of quinine in eight ounces of gum emulsion. The mixture was given in teaspoonfuls every hour, so that the whole was taken within the twelve hours. On the following day the same dose was administered in the same way. On the third day, as the symptoms were almost constantly greatly relieved, the dose was gradually reduced by one or two scruples daily. The period of treatment was generally six to eight days, during which the patients took from an ounce to an ounce and a quarter of sulphate of quinine. The medicine was usually given in the form of mixture; but when the patient expressed any dislike to it, the form of powder or pills was selected. The auxiliary means employed were a decoction of *borrago* for drink, opiate poultices, and absolute rest.

Of the twenty-three patients, fifteen were males, nine females, from twenty to thirty years of age; one third were strong, the remainder weakly and of lymphatic constitution. More than one-third had been subject to rheumatism, and nearly one-fourth had symptoms of chronic pericarditis. On an average, when admitted into hospital, the pain and swelling of the joints had existed for from three to four days. They all, with one exception, began to take the quinine on the day after admission; at this period, in two-thirds of the cases, the complexion was a straw-yellow color; tongue white and moist; great thirst; no appetite; in a few, diarrhœa and cough. In about a fourth there were evident signs of recent or chronic pericarditis; in four the pulse was 60 to 65; in thirteen, 70 to 80, or 90; in six, from 110 to 120. In all the presence of rheumatism was indicated by severe pain, with tumefaction and tension of the joints; heat or redness of the skin, and enlargement of the neighbouring veins. In some the inflammation was of a phlegmonous character; in others there was merely hydarthrosis; in others muscular pains. The number of points simultaneously attacked varied from four to twelve.

After twenty-four hours treatment all the patients, except four, experienced very considerable relief of their symptoms. In one the local symptoms completely disappeared after forty-eight hours; and the same occurred in fourteen patients during the course of the third day. In six patients there was no

sign of local disease on the fourth day, so that at this period all the patients, except two, were cured; of the latter, one was a young female laboring under general acute rheumatism, which persisted up to the seventh day; and the other, a young man who refused to continue the treatment, on the fifth day. By complete disappearance of the symptoms M. Briquet means complete absence of pain and tumefaction, with restoration of the movements of the affected joints. It was not observed that the date of attack, when the treatment was commenced, had any influence on its efficacy. A relapse took place in two cases only; and the only example of failure was one of rheumatic affection of the wrist-joint.

SHEFFIELD MEDICAL SOCIETY.

Nov. 17, 1842.

The President in the Chair.

LITHOTOMY.

The President exhibited a mulberry calculus, weighing thirty-five and a half grains, which he extracted a week ago, in the Sheffield Infirmary, from a boy aged nine years. The operation was performed with keys, knife, and staff, and was attended with a difficulty which the operator had never experienced before. On making the angle with the knife, in the groove, he found that there was not room between the two rami for the knife to pass, and in the attempt to pass it wounded the cartilaginous edge of the left ramus; and it was only by inclining the knife round the ascending ramus of the ischium that he could accomplish the object. The stone was seized by the forceps immediately. The patient doing well.

ENLARGEMENT OF THYROID BODY.

Dr. Favell exhibited a larynx and part of the trachea with the thyroid gland, much enlarged and indurated, attached. The specimen was obtained from a young man, nineteen years of age. The patient applied to Dr. Favell for relief about a fortnight ago, when he stated that he had been the subject of "asthma" for three years. The inspiration was remarkably stridulous; the expiration soft and natural; the respiratory murmur in the lungs feeble, but unaccompanied by râles of any description; the throat presented no outward deformity, but the enlarged and indurated gland which passed beneath the commencement of the sternum could be distinctly felt. The boy died suddenly from asphyxia. The diameter of the trachea compressed by the tumor was very much diminished.

ATROPHY OF OPTIC NERVES.

Mr. Porter exhibited a preparation of the base of the brain, in which the optic nerve of the right side had considerably degenerated, showing a very marked difference from the left. The man from whom it was removed had lost the sight of the right eye fifteen years ago, from inflammation under the treatment of a quack. He lost the sight of the left eye in March, 1842. His habits were temperate.

The right optic nerve was much diminished in size, and of a blueish color, semitransparent; this degeneration existed only as far back as the commissure, which was apparently healthy.

RUPTURE OF AORTA.

Mr. Porter also exhibited a preparation of a heart

removed from a man who died instantaneously after eating his supper. He had been a pensioner, and, having received his pension ten days or a fortnight before, had been almost constantly in a state of intoxication. On inspection, the pericardium was found to contain three pounds of blood, partly fluid and partly coagulated; heart was large, and just at the commencement of the aorta, a little above the semilunar valve, a ragged opening was found, large enough to allow the forefinger to pass. There was a small dilatation, in which the opening was, looking from within, and the arch of the aorta was generally large; the cavity of the left ventricle was large; the two auricles and right ventricle small—otherwise normal. No appearance of ossification about the aorta; the liver was friable—a nutmeg liver. The spleen weighed eighteen ounces. Traces of arachnitis; brain rather soft; very little effusion in the ventricles.

NECROSIS OF TIBIA.

Mr. Thomas then read the particulars of a case of necrosis, in which the tibia had been trephined to remove the sequestra evidently contained within it, at present under his care in the Sheffield Infirmary. The patient, a boy aged nineteen, exhibiting the strumous diathesis, a farm laborer, from the County Sligo, had suffered from pain and weakness in the left leg coming on suddenly five years ago. The limb became red, swollen, thicker than the thigh, and excessively painful. In about a month the right leg also became swollen and painful, and the constitutional symptoms were very great, producing delirium. His mother treated him for thirteen weeks, giving him salts and senna, and using frictions of "fresh lard and fresh butter." A doctor saw him in the sixth week, but said he "could do him no good until little holes formed, and bone came away." At the thirteenth week eight holes formed on the left leg, and six on the right, from which about a cupful of "white matter and red water" flowed in about twenty-four hours; and the pain then comparatively ceased, and the constitutional symptoms were much abated. His mother then applied strong poultices and any application recommended by friends.

About the twenty-first week a thin bit of bone was discharged from the left leg, and was followed by others, to the number of thirty, in the next year and a half, the largest being about three inches longer. About the end of the second year two portions were visible, one about three inches below the left knee, the other about four inches below the right knee. He was then admitted into the Sligo Infirmary, where the two portions were removed, and in three months he was sent home. He could not walk, even with crutches, at the commencement of the third year. His mother continued the "strong poultices;" and bits of bone of different sizes came away. He thinks about twenty pieces came away after leaving the Sligo Infirmary.

On the 19th of August he had managed to reach Sheffield, and was admitted into the Infirmary, when it was resolved to trephine the bone, and remove the sequestra which were evidently contained. The crown saw and Hey's saw were used, and several portions of bone were removed, being found in the hollow. The wound has healed very well, and the patient is in good

health. The propriety of the operation was borne out by the result.

In the discussion which ensued, as to the origin of the new bone, the opinions of Richerand, Troja, and Boyer, came under review.

Mr. Overend exhibited a specimen where two-thirds of the humerus, in its complete cylinder, had been removed, the arm of the girl from whom it was taken having become perfectly strong and useful; and Mr. Jackson exhibited another specimen, and also a drawing, representing a leg where portions of bone had been removed, leaving the outer shell of the tibia healthy, and which threw out granulations which afterwards cicatrised and healed perfectly, leaving an opening of about two inches perfectly through the bone.

SUSPECTED POISONING.

Dr. Favell then stated, that since the last meeting he had had an opportunity of examining the stomach of the man whose case formed the subject of discussion at the last meeting, and whose death was supposed to have been caused by arsenic. The body was disinterred, after it had been buried for three weeks, by order of the coroner. The stomach was in a state of good preservation; the œsophageal half of the lining membrane was intensely injected, but the redness was generally diffused, not in patches, and was continued along the smaller curvature; the pyloric half of the mucous membrane was natural; there were no appearances of ulceration in any portion.

The stomach was then cut into small pieces, and boiled with distilled water in a Florence flask, and afterwards submitted to the usual tests for arsenic—the ammoniaco-nitrate of silver, the ammoniaco-sulphate of copper, sulphuretted hydrogen, and Marsh's test; but not the slightest indications of arsenical poison were afforded. The fluid was subsequently tested for oxalic acid—thus:—baryta, sulph. copper, lead, and bichloride of mercury; but with equal want of success.

Supposing arsenic to have been administered, is it probable, that, during the sixteen days which the man lived, and during which period he was constantly under medical treatment, the whole of the poison had been ejected from the system?

SECOND ANNUAL REPORT

OF THE

GLOUCESTERSHIRE MEDICAL AND SURGICAL ASSOCIATION.

October 4, 1842.

In presenting the annual report of the proceedings of the association, the central section observe with pleasure that the grounds of congratulation which last year existed have in no degree passed away; on the contrary, the spirit with which the affairs of the association have proceeded has been productive of increased benefit, and affords a just stimulus for further exertion.

Amongst the primary objects of the association are the public interests of the profession, and parliamentary legislation connected with it. The events of the past year leave little or no doubt that some legal measure, having an important influence on the

profession, will soon be adopted—the necessity, therefore, for medical associations to watch and protect our interests, has become more imperative on this account than at any previous period.

On the earliest possible opportunity, after the announcement of the intention of the Government to bring in a bill for the regulation of the medical profession, your society memorialised the Secretary of State on the subject. The requirements of the profession were strongly, but respectfully, set forth—the opinion of the association on the important subject of medical reform, and the want of efficient legal protection to its members, were fully embodied with the general matter of the memorial.

The grievances inflicted on the profession by the poor-law commissioners have been an unceasing object of consideration. The legislature has been petitioned, and the individual members of both Houses of Parliament connected with this county have been addressed by your society on the subject. From *some* of these, answers have been received, exhibiting an interest in the profession and its present affairs; and although it must be acknowledged that, on the whole, our representatives indicate a most unjust indifference to those questions relating to the medical profession, still these repeated applications must tend to awaken a more lively interest in our behalf, and produce that share of legislative consideration which has hitherto been denied us.

It is even now a matter of congratulation, that the effort made by associated bodies of medical men have been productive of very considerable success. In the report of last year, sanguine hopes were expressed of a modification in the working of the Poor-law Bill; those hopes have not been disappointed, and it has been shown, that the persevering remonstrances of large and respectable bodies of men, such as constitute our medical associations, compel attention even from the reluctant ear of political leaders and poor-law commissioners.

The formation, then, of medical associations, which is now taking place in all parts of the kingdom, is a circumstance which may well afford our society the greatest satisfaction; and it is a further pleasure to observe, taking a most prominent part in their proceedings, the most distinguished men who adorn the respective branches of the profession—many of whom can have no possible self-interest in the questions they engage in, and whose only motive must be the advancement of the welfare and dignity of the profession, and the benefit of the public depending on it.

Amongst the occurrences of the past year, and possessing a high interest to the society, must be noticed the prosecution of a druggist, at Cheltenham, for illegally practising as an apothecary. Our association held communications with the Apothecaries' Company on the subject, and furnished information which led to legal proceedings, and the conviction of the offender. This important check to the encroachments on the profession is a satisfactory result of the interference and efforts of the association, and has been extensively made known, as a caution to others, and a preventive or check to the evil.

Although, by past exertion, so much has been accomplished, there must yet be no diminution of effort.

The practices of the poor-law commissioners, as they relate to the profession, will require a constant and vigilant observance; without an effort to retain it, even that which has been conceded may be lost; but the prospect of a bill to regulate our profession, to be introduced by the Government, is a most anxious and important event. There is little reason to believe that the bill will be satisfactory to the great body of medical practitioners, and, if otherwise, the only chance of preventing its objectionable provisions from becoming law, will be by the early and active efforts of associated bodies like our own, and the individual efforts of our members amongst their respective parliamentary representatives.

The quarterly meetings, during the year 1843, will be held at Tewkesbury, Stroud, and Newport; and the annual meeting at Gloucester.

ASSURANCE OFFICE FEES.

GENTLEMEN,—As the subject of assurance office fees is one which has been discussed in your Journal, and at the meeting of the Provincial Association, and in your last Number a report has been given of a meeting of the medical practitioners of Shrewsbury, I trust you will allow me an opportunity in your next Number of making a few observations on this question, which has been hitherto attended with difficulty. The report alluded to states that the medical practitioners of Shrewsbury were unanimously of opinion, and pledged themselves “not to answer inquiries of insurance offices unless accompanied by a fee of one guinea.” Now this resolution appears to me of too sweeping a nature, and I think cannot be followed in *all* cases. But a distinction can easily be made which might satisfy all parties. It is this: let the medical man referred to ascertain (and it is not difficult) whether the life is insured by the party on whom he is called to report, or whether the insurance is effected by another party; in the former case—viz., where the patient is insuring his own life, no fee should be taken, for I should consider the trouble very little for any patient whom I had been attending, and I have under such circumstances invariably declined accepting any fee when it has been offered; but in the latter case—viz., where the assurance is effected by another party to satisfy debts, or to pay fines for the renewal of property held on lives, which is often done in this town (the insured not being interested), undoubtedly the medical man referred to is entitled to a fee; still even in these instances the assurance offices cannot be called on to pay, as the production of the answers form a part of the contract entered into before the office can accept the proposal of the insurer; the question will then arise, who is to remunerate the medical attendant? My answer is, let the medical man ascertain, as I have before stated, who is insuring the life, and if he finds his patient is not the party, let him write to the office for a fee before sending the answers, and the office can make the charge on the party proposing the insurance, who, I feel assured, would very willingly pay it.

I trust that this question will before long be placed on a proper basis, and that medical men will act liberally, and have liberality shown to them in this, as well as in other subjects in which the public are interested.

I remain, Gentlemen,

Your very obedient servant,

HENRY PHÉNÉ.

Ryde, Isle of Wight, Nov. 16, 1842.

ON THE PUBLICATION OF WORKS IN PARTS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—From the zeal which the Provincial Medical and Surgical Association has invariably shown to promote the interests of, and to diffuse knowledge among, the medical profession, I feel assured that you will agree with me in reprobating any procedure which may have a contrary tendency.

It has latterly become a practice to publish medical and other books in parts, with a detailed prospectus, specifying the number of parts of which the work would consist, as well as the periods of publication. This method of publishing, if the terms of the prospectus were abided by, has, no doubt, many advantages; information is conveyed more early, and the expense more easily borne.

But the use that is frequently made of this plan of publication has not only become fraudulent, but extremely detrimental to the cause of science; for there can be no doubt that the real friends and patrons of literature are the original subscribers to books in progress; it is usually through their means alone that expensive works are brought out: when they are completed (even if the terms of publication be complied with) they commonly may be obtained for one-half or one-third of the price the original subscriber has paid. But the total disregard that is now paid to conditions of publication is a peculiar hardship on subscribers, and is, in fact, a direct fraud on the public.

A work, for instance, is advertised to be published in twenty parts, at a specified price and at certain intervals. The purchaser, calculating his means, and the time required for the completion of the book, takes it in; no sooner, however, has he got eight or ten numbers, than he finds that he is himself taken in; for instead of twenty parts, double or treble that number will be required to finish the work, and in some instances the price is increased, and the quantity of letter-press diminished.

In the year 1833, a Mr. Henderson published the first number of "a new English version of the great work of Cuvier, &c.—Regne Animal;" with the following conditions printed on the wrapper, and on that of several succeeding parts, which are now lying before me. "The work will consist of thirty-six numbers, each will be sold at one shilling, and the contents will be letter-press and plates. The advantages of the new work will at once be demonstrated when it is stated that, for the sum of thirty-six shillings, the version of a celebrated standard work will be obtained, richly illustrated, which in the original with its plates costs more than thirty-six pounds."

Here was a prospectus clear and definite enough; and, although I had the original work, yet, thinking this would be a cheap and perhaps useful translation of it, I ordered it. When the 13th number was published, the price was raised to *two shillings* a number, without any reason being given for this double charge. I continued, however, to go on with it to the 70th, at this price, when, as the work seemed to be interminable, the numbers containing only a few trumpery daubs, which were called plates, without any letter-press, I wrote to the publisher to know if the work would ever

conclude, and if so, when such a desideratum might be expected. To this application no answer was returned. The work was, however, spun out to about a hundred numbers, so that I had to pay nearly ten pounds for a book, the price of which was originally guaranteed should not exceed *thirty-six shillings*!

As this work was a translation from a published book, and, therefore, its extent known beforehand, and as the only motive for its publication was its cheapness, the prospectus could only be considered as a bait to allure purchasers to begin with it, as they must then either go on, or have useless and incomplete numbers on their hands.

Such conduct is a disgrace to publishers; it has a tendency to destroy all confidence between them and the public, and ought to be reprobated by every honest man.

In the year 1832, Dr. James Copland published the first part of a "Dictionary of Practical Medicine." On the cover of this part is the following announcement:—"The work will be published in four parts, the whole being confined within the compass of one large volume. Part second will be published in April, 1833, and the whole work will be published in the course of a few months." Seeing this prospectus, which, like that of the above notable work, was clear and definite, I ordered the book; for although I had the "Cyclopædia of Practical Medicine," yet this promised to be a useful compendium, and more fitted for occasional reference than the more elaborate essays of its immediate predecessor. How has Dr. Copland fulfilled his engagement?—instead of a few months, ten years have elapsed, and the work is not half concluded; instead of four parts, twelve, at least, will be required. Thus, independently of its frustrating the design for which it was originally brought out and purchased, it is almost useless even as a work of reference; for the author in one article refers to others hitherto unpublished; consequently none can be read with any degree of satisfaction.

Besides, in the progressive state of medical, pathological, and pharmaceutical science, the early parts of the work become obsolete before the latter are published: indeed, an ordinary medical life will be spent during its publication, to say nothing of the expense, which will be at least treble what was stipulated for. With regard to the execution of the parts published, I have no remarks to make. All that the public expects in a work of this kind is, that it shall be a faithful digest of what is previously known; the object being to facilitate reference by having comprised by alphabetical arrangement in one work what must else be sought for in various books. Hence novelty is not expected, and so far as I have seen of this dictionary, it is not to be found. The articles, however, contain a fair summary of what has been previously written, occasionally interspersed with the results of the author's own experience.

I am quite aware that due allowance must be made not only as regards the extent of a publication of this kind, but also the time of its completion. The materials may accumulate as the author proceeds, and increasing avocations may render punctuality impracticable. Still some attention should be paid to both these considerations when a writer projects and issues his prospectus for such a publication.

With regard to the latter of these reasons—viz., the want of time, I am informed that it does not apply to Dr. Copland. A medical friend in town to whom I wrote some time ago on this subject, stated in his reply that “the dictionary *ought* to be soon completed, for he understood that Dr. Copland had little else to do than to write it.”

From the progress, however, already made in this work, and the contingencies of life, it is doubtful whether it ever will be finished. Indeed, the respectability of the publishers is unfortunately no guarantee that a work commenced in parts shall be concluded. In 1832, the firm of Black, Young, and Young, published the first part of “Boucher’s Glossary.” The editors stated that “a large part of the work was already transcribed for the press, and that a part would be published every two months, until the work was completed, forming two quarto volumes;” the price to subscribers being seven shillings and sixpence a part, to non-subscribers nine shillings. The second part was regularly published in September, 1832. Since then I have not been able to procure a part, and I believe the work is discontinued. Independently of the hardship on the subscribers, it is matter of deep regret that this work should be suspended. The execution of the two published parts is admirable, and the whole work would supply a chasm in English literature which is very much felt.

When books, also, are published in parts, it occasionally happens that a new edition is out before the numbers of the former one are completed. In 1837, Messrs. Taylor and Walton published the first part of the sixth edition of “Turner’s Chemistry,” and on the title page it is stated that “the second part should be published in November, the third and concluding part early in 1838.” The concluding part is not yet published (at least I have not been able to procure it), although the seventh edition is now in circulation.

Although this letter has extended much beyond what I intended it, yet I cannot conclude without adverting to the “Cyclopædia of Anatomy and Physiology,” now in course of publication. Notwithstanding the high respectability of the editor, the grand phalanx and array of writers appended to each number, and the eulogistical manner in which this work is occasionally mentioned by the periodical press, I cannot but regard it as another instance of the disingenuous system of book-making, which is the object of this letter to reprobate. This cyclopædia commenced in 1835, as a counterpart of that on Practical Medicine. The prospectus stated that it would be concluded in twenty parts, one to be published every two months. Although five shillings seemed rather high for each of these thin and rather jejune parts (in the present reduced state of the book trade) yet, relying on the respectability of the editor and the regularity with which the prototype of this work was published, I was induced to procure it. Instead, however, of twenty parts, nearly double that number will be required to complete it, and (if the publication proceed as it has latterly done) half as many years. If allowance might be made for the slow progress of Dr. Copland’s Dictionary, the work of one man, none can be made for this with such a host of contributors. Besides, when we see the regularity with which other encyclopædian publications

proceed—the Penny Cyclopædia, for instance—a work full of original articles and illustrations of the highest value, and embracing the whole circle of human knowledge, one cannot but be surprised at the miscalculation of the extent, as well as the tardiness and irregularity of publication, of the “Cyclopædia of Anatomy.”

It is not my object, were I able, to criticise this work, particularly after the favorable opinions of it that have been expressed by the two leading medical reviews. It is, however, no doubt true that a good deal of medical and other criticism is written by interested parties; and certainly, were I to estimate this work by my own feelings and opinion, I should say that many parts of it are not suited to the wants of the medical public. No one, I apprehend, would think of studying or learning a science from a cyclopædia. An essay on a given subject ought to be complete in itself. But the perpetual references from one article to another in cyclopædias not only distract the attention, but render it necessary to have almost every volume at hand before one article can be read with any satisfaction or advantage.

No doubt many of the essays of the “Cyclopædia of Anatomy” are extremely valuable; indeed, what can be otherwise which comes from such writers as Professor Owen, and some others of the contributors. But after selecting some of the leading articles, unqualified praise must then, I believe, stop. Many are very common-place essays, and others are principally compilations. Some of them, also, occupy an undue space, to the neglect or exclusion of other subjects, equally, if not more interesting, to the medical profession generally. In the last part but one, for instance, is a most elaborate essay on Motion, by Mr. Bishop, occupying nearly the whole part; highly valuable, I dare say, and interesting, to those who are able to appreciate it, and who will take the trouble to read it; but I apprehend twenty medical men in the kingdom will not be found who will cut the leaves open. Others of the articles have been got up hastily, and are not written by those to whom they were at first entrusted. The article Myriapoda in the last part published, is evidently one of those. This should have been written by Mr. Newport; but it appears that Professor Rymer Jones was applied to at the eleventh hour to furnish it, and certainly it does him the highest credit. It is, however, doing Mr. Rymer Jones no injustice to say that in this hitherto neglected and interesting branch of entomology, Mr. Newport almost stands alone, or, at least, is without a rival, from the extent of his researches and his intimate acquaintance with it.

As a standard work of reference, this cyclopædia, notwithstanding its extent, is very defective. There are innumerable subjects in human and comparative anatomy, physiology, and pathology, for which it is in vain to search its pages; and when we contrast its price with that of many works which have recently issued from the press, one cannot but feel that this cyclopædia will be one of the last speculations of its kind.

I remain, Gentlemen,
Your’s, &c.,

Worksworth, Derbyshire,
Nov. 16, 1842.

P.

*** The above has been authenticated by the signature of a highly respectable correspondent.

RETROSPECT OF THE MEDICAL SCIENCES.

EXTRAORDINARY CASE OF TWINS.

Under this title Dr. Jameson, the assistant-surgeon to Mercer's Hospital, has published a singular case in the "Dublin Journal of Medical Science" for September last. He was called on the evening of the 3rd of April last to a lady, thirty years of age, the mother of four living children, who had been delivered on the preceding 13th of February of a son, by a midwife in the county of Wicklow. On that occasion the labor apparently went on well; it was completed in four hours, and the placenta came away ten minutes afterwards without any subsequent hæmorrhage; the patient recovered from this labor, and employed herself in her avocations, but remarked that the abdomen had not much decreased in size, which she attributed to bad swathing. Her general health was good, and the supply of milk sufficient.

When Dr. Jameson was sent for, she was suffering from severe pains through the abdomen, recurring at uncertain intervals, and lasting generally about five minutes at a time. On examining the abdomen during a pain, a firm, hard tumor was felt, reaching as high as the umbilicus, which became softer on the subsidence of the pain, and which was at once conjectured to be the gravid uterus. On applying the stethoscope over the tumor, after some difficulty Dr. Jameson thought he heard a placental murmur in the right iliac fossa, but no sound of the fetal heart, from which he suggested the possibility of his patient's being with child, and then in labor. This idea, from the circumstances previously detailed, was at once repudiated, and a vaginal examination refused; but a short time afterwards, while the doctor was conversing with the husband, he was hurriedly summoned to the bedside of his patient, who told him something was coming from her. On making the examination during a pain, the head of a small child was found presenting with the membranes complete; and on the recurrence of another pain, the child, membranes, and placenta were expelled together. The bag, which contained very little liquor amnii, was immediately opened, and it was found to contain a dead male child, at about the sixth month of gestation, shrivelled and dark, but not at all putrid or decomposed, and between eight and nine inches long. The cord was small, easily giving way under the fingers, but the placenta appeared to be fully as large as one belonging to a full-grown fœtus, and healthy. Dr. Jameson has often met with a smaller one at the full period.

The last time the patient menstruated previous to this pregnancy was in the latter end of April, 1841, and as she was confined on the 13th of February last, forty-two weeks must consequently have elapsed between the last period of menstruation and the birth of the living child, forty-nine weeks between the menstrual period and the evulsion of the dead fœtus.

FORCING THE STRICTURE.

When in the treatment of a stricture the finest catheters and dilating bougies have failed to be of service, and the retention of urine has continued some time, so that the bladder must be relieved of its contents at all hazards, the surgeon has the choice of two proceedings—puncture of the bladder and forcing

a passage through the urethra with a catheter (cathétérisme forcé). Of these two M. Roux prefers the latter, and he uses it in cases even, where the state of distension of the bladder is not such as to threaten immediate danger.

So far, however, from concealing the dangers attending the introduction of a conical catheter forcibly passed into a portion of the urethra affected with stricture, M. Roux believes that a lengthened experience is requisite to enable the surgeon to perform the operation with impunity; and even then he is not certain of not making a false passage, but he considers that, as puncturing the bladder often leads to fatal consequences, it is, perhaps, preferable to have recourse to catheterism, taking the precautions necessary to avoid the chances of failure, with respect to the shape of the instrument, its introduction, and the manner of keeping it for a time in the bladder.

The conical catheter used should have its anterior extremity pointed but not sharp, full, and sufficiently strong to overcome the resistance it is required to surmount. With respect to the varied inflexions by which the instrument is made to penetrate into the bladder, they are difficult to describe. All that can be said is, that while the catheter is passed along the urethra, its progress should be governed by the aid of the index finger of the left hand introduced into the rectum. The surgeon will perceive by the uniform thickness of the septum which separates the finger from the end of the catheter, whether it is passed correctly, or is making a false passage. In the latter case it must be withdrawn directly, and carried in the direction of the axis of the canal. When the instrument has passed through the obstruction, unless there is considerable engorgement of the middle lobe of the prostate, it may be easily carried through the prostatic portion of the urethra, and into the bladder.

The catheter, thus passed, is so tightly embraced, that considerable efforts would be required for its removal, but it should be left in, and it is the rule not to remove it for twenty-four or thirty-six hours after its introduction, when its mobility will allow the operator to substitute a gum elastic catheter for it. It is to be kept in position by ligatures attached to the rings of the instrument, which are then passed behind the thighs, and brought back to be secured to a body bandage, which in its turn is maintained in place by scapularies.

It is of the utmost importance that the end of the catheter should be free in the bladder, and not be able, under any circumstances, to strike against its parietes; it is, therefore, advisable to recommend the patient to make only a little water at a time, in order to prevent the contraction of the bladder, which must unavoidably follow its being too much emptied. This advice is equally available in cases where puncture of the bladder has been practised.—*Journ. de Med. et Chir. Prat.*, Sept. 1842.

PURULENT INFECTION.

A man who died recently at la Charité, from an injury of the head, has been made the subject of some remarks on purulent infection by M. Velpeau. He had fallen on his head, and became insensible. He

was carried to the Hôtel-Dieu, where he found himself so much better the next day that he left immediately; but he had scarcely reached home before he experienced tremblings and symptoms of an accession of fever, for which he was admitted into la Charité under the physician's care. The fever so closely resembled an intermittent, that no other cause was looked for, and he was treated accordingly with the sulphate of quinine. He returned home some days afterwards, but, continuing to experience rigors, he placed himself under the care of M. Velpeau, who at once pronounced a very different prognosis, and stated that the case would terminate fatally. In addition to the symptoms of intermittent fever, the man was continually feverish, with a dry tongue; he was in a kind of stupor, complained of dull pains in different parts of his body, especially in the epigastrium and right hypochondrium, in which there was a large abscess. There was also a large wound on the head, suppurating badly; the cranium was laid bare, and fractured. M. Velpeau was of opinion that the man, instead of laboring under intermittent fever, was affected with the more serious symptoms of purulent infection. The man died soon afterwards.

On examination of the body the skull was found to be fractured, but the broken bone was not depressed. The liver contained several large purulent foyers, and some were seen in the lungs. There was also partial peritonitis near the situation of the liver. M. Velpeau's diagnosis was in this case fully confirmed; the mistake committed by the physicians is not an uncommon one; very distinguished practitioners have been thus deceived, to avoid which it is requisite to have studied the progress of the purulent infection very closely.

The tremblings and rigors, which were looked upon as the forerunners of an intermittent fever, are observed under different circumstances, and are, according to M. Velpeau, the indication of the introduction of a poison into the economy. Thus, when after a painful catheterism, such symptoms occur, practitioners say that the passing the catheter has been followed by one or more attacks of ague. This pretended ague, according to the professor, is no other than the indication that, under the influence of a modification with the mechanism of which we are not well acquainted, a certain quantity of urine has penetrated into the economy. It is an urinary affection, and so far from offering only the importance of an ephemeral fever, is, on the contrary, a very dangerous symptom, for in many cases it indicates a fatal termination. M. Velpeau has collected six or seven examples of this kind, and among others the following:—

A strong, robust, and healthy young man, a printer, presented himself at la Charité, to be treated for a stricture. He was refused admission, as there was not a bed to be had, but he struggled with the porter, and forced his way in. M. Velpeau saw him the next day, and passed a very fine bougie through the urethra without effort. Rigors and tremblings came on in the course of the day, and he died at the end of twenty-four hours.

Under other circumstances these rigors are followed by arthritis of the knees, feet, and wrists, and suppuration is established with extraordinary rapidity in those articulations. All these symptoms arise from the same cause, the absorption of a poison into the

economy, and intermittent fevers themselves have not any other origin. The trembling, which is the first period, is the sign of the introduction of the miasma into the humors. Most frequently, however, this poison is not so violent but that the economy can free itself of it; but, in certain cases of typhus, death follows very rapidly.

Thus the introduction into the economy of an urine of bad quality, the introduction of pus or marsh miasma, is all one and the same thing; it is in each case a poisoning which announces itself by rigors and tremblings. But it will be readily understood that the danger differs according to the nature of the poison introduced. Many other diseases might be brought into the same category, but for the present it is sufficient to point out the analogy that exists between purulent infection, urinary infection, and intermittent fevers.

How does this poison enter the economy? Purulent infection has been said to be nothing else than phlebitis, but M. Velpeau has found the veins not inflamed in a great many cases where the purulent infection was very marked. It is certain that the pus is conveyed with the blood into the parenchymatous organs, where it acts in two ways; it is either transported *en masse* into the organ, and forms a deposit there, or else some globules only are deposited, which create irritation in the tissue, produce inflammation, and an abscess forms; it is very certain that this phenomenon may take place without phlebitis. The veins are sometimes healthy, sometimes they are inflamed at a distance from the primitive collection, and it is not necessary to suppose the existence of phlebitis to explain this absorption. The veins which are near the pus may absorb it, and carry it to a distance. There may also be a genuine imbibition, and the inflammation which is so commonly observed may be only the effect, not the cause, of the absorption.—*Journ. de Med. et Chir. Prat.*, Sept., 1842.

ABSCESS OF THE LIVER.

The following case of abscess of the liver treated successfully by Dr. Placido Portal, one of the professors at the University of Palermo, is interesting from its successful termination, after the opening of the abscess. Giuseppi Capozzi, of Naples, a soldier, twenty-five years of age, of a bilious temperament and weak constitution, after having had attacks of ague, and after having been cured of syphilis by mercurial treatment, experienced a feeling of weight in the region of the liver, attended with emaciation, constipation, yellow tint of the skin, and pains in the joints. On the 15th of November, 1839, a tumor was discovered in the right hypochondrium, presenting the following appearances:—It began under the right false ribs, caused the xyphoid cartilage to project very much, and threw its point forwards; it also occupied the umbilical region, and extended down to the middle of the right side; at its lower part it was prominent, hard, and painful, with deep-seated and obscure fluctuation; the skin that covered it was of a natural color. The patient complained chiefly of pain and weight in the right hypochondrium. The abdomen was hard and distended in the epigastric region, but soft in the hypogastrium; the enormous size of the tumor prevented the patient lying on his

back, and forced him to bend forwards when he was sitting. He had anorexia and dyspepsia, and occasionally was troubled with nausea and vomiting of a mucous matter; the tongue was covered with a thin white coat; the face was of a deep yellow color; the pulse small, contracted, and slow; cough dry and fatiguing; urine scanty and limpid; the legs œdematous; and he had feverish symptoms, with rigors and burning thirst.

Under these circumstances, Dr. Portal diagnosed a vast abscess on the convex surface of the liver, and chiefly of its anterior and inferior edge, which he determined to open. He performed the operation as follows:—The patient being laid in bed, the surgeon introduced a trocar into the most prominent part of the tumor in the right hypochondrium, where the skin appeared to be thinnest, about two fingers' breadth below the ensiform cartilage. On the withdrawal of the trocar, a thick, very fœtid, brownish-colored pus was discharged. Having next introduced a cannulated sound, he incised longitudinally from without inwards the linea alba and the fibres of the rectus abdominis; then introducing the finger, he dilated the opening to about four inches. An enormous quantity of pus was discharged, containing an infinite number of hydatids of different dimensions, and a pseudo-membrane a foot and a half square. A piece of linen, with simple cerate spread on it was introduced into the wound, a pledget of lint and compresses laid on it, and a body bandage placed over all. The patient was then put to bed and laid on his left side. He felt himself first relieved by the operation, but afterwards fainted, soon recovering however. The quantity of pus discharged in the course of twenty minutes is said to have been about forty pounds, and it contained one hundred hydatids.

Four hours after the operation the patient experienced severe pain all over the abdomen, attended with high fever; the pain was relieved by the application of thirty leeches, and three poultices successively over the abdomen. He passed a good night, and the next day a large quantity of pus mixed with bile was discharged. A canula of gum elastic, five inches long, with a calibre of five lines, was fixed in the opening to facilitate the spontaneous evacuation of the pus. The symptoms gradually diminished in intensity, the pus became more laudable and ceased by degrees, and forty-six days after the operation, the wound had completely cicatrised.—*Annali Universali di Medicina*.

CONTRIBUTIONS TO A KNOWLEDGE OF GREEK AND TURKISH REMEDIES.

By X. LANDERER, of Athens.

Method of Curing Ague among the Mainots.—The following is a celebrated remedy for ague in Maina:—Equal parts of *nisatisi* (hydrochlorate of ammonia) and pepper are mixed with *betmesi* (wine evaporated to the thickness of syrup, and mixed with ash, so as to form an electuary), of which the patient takes

a tablespoonful some hours before the commencement of the paroxysm. After this dose has been repeated three or four times the fever seldom returns.

On Arum Dracunculus.—A plant frequently occurring in the moist districts of Greece is the arum dracunculus, the roots of which are used by the country people against the bite of snakes, and likewise as a remedy for scrofulous tumors. It is frequently met with in the olive plantations in the neighbourhood of Athens; where, at the time of flowering, it diffuses an odor so strong, disgusting, and putrid, that, on approaching, it might be inferred as caused by animal matter in rapid putrefaction. By remaining for a short time in the vicinity of the blooming plant, dizziness, headache, and vomiting, ensue. Many workmen are attacked by these symptoms of poisoning in the gardens of the olive tree, when obliged to expose themselves to the offensive exhalations of this plant. This offensive smell is only evolved from the spadix after the husk of the flower has opened, and continues during the blooming of the plant. At morning and evening it is strongest; for which reason, in this case also, a certain degree of dampness in the atmosphere seems necessary for the evolution of the odor. One evening I gathered about forty of these spadices, an occupation which induced a violent headache and sickness.—*Annals of Chymistry*, No. 8.

PROMOTIONS AND APPOINTMENTS.

War-office, November 22.

42nd Foot—William Mure Muir, M.D., to be assistant-surgeon, vice M'Gregor, appointed to the staff.

97th—Assistant-surgeon James John Majoribanks Wardrop, from the staff, to be assistant-surgeon, vice Leith, deceased.

Hospital Staff—Assistant-surgeon James M'Gregor, M.D., from the 42nd, to be assistant-surgeon to the forces, vice Sharpley, deceased; Thomas Haliday Young, gent., to be assistant-surgeon to the forces, vice Wardrop.

APOTHECARIES' HALL.

Licentiates admitted Thursday, November 17, 1842.

Tempest Pollard, Pontefract; A. G. Lamotte, Tiverton; J. Hendrie, Wigton; J. Morgan, Somerset

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An Apprentice.—For a student we would recommend Dr. Reid's "Elements of Chemistry;" for one more advanced, Dr. Turner's "Chemistry," by Gregory and Liebig.

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COURSE OF CLINICAL LECTURES, DELIVERED AT THE MIDDLESEX HOSPITAL. BY DR. WATSON.

Lecture VI.—November 19, 1842.

GENTLEMEN,—I shall notice first to day, according to my custom, a case of death in the hospital. The deceased was not one of my own patients, and, therefore, I was not so familiarly acquainted with the previous history of the case; that has, however, been satisfactorily detailed to me, and from this statement I shall be enabled to lay before you the particulars, antecedent to the time of my first seeing her. In the temporary absence of my colleague, Dr. Wilson, I was requested to visit one of his patients, who was seriously and alarmingly ill. I found her lying quite motionless, in a state of profound insensibility, and foaming between the lips. The pupil of the right eye was considerably dilated and much larger than that of the left, and both pupils were fixed.

The following was her history:—Anne Newton, a single woman, aged twenty-four, a servant, was admitted into hospital, under Dr. Wilson, on the 18th of last month (October). She had a pale and anxious face, was extremely nervous, and cried whenever she was spoken to. She complained of pains in the knees, and of general debility; she had also slight soreness of the throat, but there was found nothing visibly wrong in the throat, nor was there any swelling or redness of the joints affected with pain; her legs, however, swelled towards night; she had a bad appetite, suffered nocturnal perspirations, and had a slight barking cough; the catamenia had been absent for the last two months, from the commencement of which period she dated her general ailments. She had had, at the age of sixteen, severe rheumatic fever, which at that time confined her to bed for eleven weeks, and she was then also delirious. From that time forward she was, she said, "short in the breath," and she had suffered also from slighter rheumatic attacks ever since that first illness. There was a cooing or mewing sound with the systole of the heart, chiefly at its apex. She derived no relief from colchicum, iodide of potassium, bark, or mineral acid with henbane. During the first week in this month (November) she complained of being deaf, or rather, she acknowledged that she was deaf, when she was asked if such was the case; but on the 12th and 14th the deafness was much increased, and was accompanied by pain in the right side of the head; the ear on that side was found also to be the deafer. There was much pain and distress when the mastoid process of the right side was tapped, but there was no discharge; the external meatus was dry; there was ronchus and slight crepitation about the lower lobe

of the right lung. Her head was shaved, leeches were applied twice to the mastoid process, and mercurial medicines administered. In the course of the day, on the 14th, she screamed and shrieked violently with pain in the head, and soon afterwards she became delirious. In the evening she was comatose, breathing with some stertor; she was in this state when I was called in to see her; the pupil of the right eye was now very much dilated, while the left was contracted, and the left conjunctiva was inflamed, with some pus in the eye. She sunk gradually, and died in this condition on the 17th.

This history would lead us to suspect that there was not only serious disease of the head, but also internal disease of the ear—perhaps the rather common disease of the bones of the ear. That we should find, on examination after death, some recent mischief in the brain, I fully expected—and such we did find, as you shall see. I also expected that it would be some inflammation, or abscess, perhaps, connected with disease within the ear, and I conjectured that we should find some such inflammation or abscess. This we did not find. It was a case of apoplexy—a case of cerebral hæmorrhage.

On the table lies the brain, which, in our examination, we have disturbed as little as possible, before submitting it to your inspection. In the right hemisphere of the brain was found a considerable clot of blood. A slice being made into the brain, the ventricle was found to contain serum and blood; a second slice presented the same appearance, and showed that the serum so found belonged to the coagulum, from which it had oozed. The large clot occupies the ventricle, and the substance of the brain around it is bruised and broken down. Here you perceive the large clot with some of the bruised brain adhering to it. The brain itself is quite soft, and that accounts for the symptoms detailed. You see, also, some of the blood and serum filling up the chinks between the convolutions, and so causing the variegated appearance that is observed. According to Mr. Shaw's conjecture we find that the extravasated blood worked its way out to the surface. Were there time now for closer search we should probably discover the particular vessel from which the blood escaped. The coma is fairly explained by the pressure of this clot on the brain. Why the patient suffered so much pain does not admit so easily of explanation. In some instances this kind of apoplexy is accompanied by little pain.

In this case the age of the patient is deserving of notice; it is a remarkable thing to see death from cerebral hæmorrhage in one so young. I have certainly seen in this hospital half a dozen, or it may be eight or ten such cases, in persons in the early part of their adult life, and even in one instance in the person of a young child. But apoplexy from this cause is eminently a complaint of advanced life, though occa-

sionally it occurs at all ages, and even in young children. Why it is pre-eminently a disease of advanced life, is explained by circumstances incidental to that period of life—to changes in the constitution then taking place, to which I had occasion before now to advert. The blood-vessels in advanced life become enfeebled and diseased; their coats become ossified and brittle; the heart suffers from the changes going on, and, being impaired in its functions, leads to engorgement of the veins and obstructed cerebral circulation. Beneath the pressure of the accumulated blood the brittle walls of the oppressed veins give way. The extravasation is not in all cases fatal—at least, not immediately attended by a fatal result; the patient may recover from the first effects. I would, however, have you on your guard in those instances of seeming recovery. Frequently the clotted blood, not causing death at first, acts on the brain as any other foreign matter, such as a bullet; it produces inflammation, and thus, sooner or later, a fatal result. Some time ago I was hastily summoned to visit a gentleman in Dorset-square, who had an attack of apoplexy. From the nature of the summons, I fully expected to find that I had been sent for by some member of his family, and that from his family I should hear the particulars of the attack; the gentleman I expected to find either still in a state of insensibility, or at all events in such a state of feebleness and exhaustion as to render him unfitted for and incapable of conversation. To my very great surprise I found the gentleman himself had sent for me; that he was, at the time of my reaching his house, apparently well. He related to me the circumstances of the attack; it had been severe, and he had been for some time insensible; he was fearful of a return of it, and, being anxious to go out to shoot on the following day, according to his previous arrangements, he had desired my advice. I, of course, warned him against any such attempt; I told him he must not think of going on the purposed excursion, but, on the contrary, must keep perfectly quiet and unexcited. Next day an injudicious friend called on him, and entered into a long and earnest conversation with him on business in the West Indies, where both had property. The consequences were such as should be expected. In the course of the conversation, in which he was much interested, he suddenly lost the thread of his ideas; he could not answer questions put to him, and vainly endeavoured to overcome the confusion of which he was conscious. I was sent for again. On my arrival I found nothing apparently wrong with him—that is, nothing palpable. His intellect was perfect as ever, but he complained that he could not recollect his words. He had no pain, but his want of recollection was painfully evident. He repeated words constantly—thus, for instance, he would say “quite right—right—right—right—right”—being unable to follow up his ideas, or to assure himself of what he had last said. He had taken some medicine the day before, the flavor of which he liked; what the flavor was he vainly endeavoured to tell, and he seemed irritated with some of his family because they could not explain to me the flavor he alluded to. He essayed himself, and repeated “perfor—perfor.” I said it must be camphor he meant—it was so—there was a similarity of sound in the words. By slow degrees he lost the power of his right side; medical

treatment was ineffective; at length consciousness deserted him; he fell into a deep sleep, and in that state died. I had permission from his family to make a post-mortem examination, and found in the upper part of the left hemisphere a cavity containing about two ounces of pus, and in the middle of the pus a small mass of a toughish consistency and a dull red color, which was, no doubt, the extravasated blood. The effusion was consequent on the brittleness of the arteries. As I have said, persons of the age to which this gentleman had reached, are subject to internal changes that enfeeble the heart—the veins becoming turgid from accumulation—and thus a continual strain is kept up on the worn, or brittle vessels, like the pressure of the constant stream of water on the weak part of the hose of a fire-engine, and in like manner the weak part gives way.

In the case of the patient, Anne Newton, the coma was very profound. When I saw her there was no movement whatever but that of respiration, and every effort made was quite inadequate to rouse her; I therefore am not enabled to say whether there was paralysis—whether one side, or both, or neither was affected by palsy. The general rule is, as you are aware, that the side opposite to that of the injury in the brain is paralysed; it was so in the case of the gentleman of whom I have spoken; the injury was on the left side of his brain; his right side was palsied. The pupil of her right eye was dilated. The iris is a sort of sphincter muscle; when these muscles lose their power they dilate; the palsy of the pupil is, therefore, its dilatation, and so here the left pupil was small, the right much enlarged. The natural state of the pupil or iris is that of contraction, as you can see if you catch an infant in a sound sleep, and gently open the eyelids; you will then find the pupil very small. There are many other very interesting facts which belong to the history of cerebral hæmorrhage, but what the case immediately before us does not suggest, I shall not anticipate. There have been several such apoplectic attacks of late, and it is curious to find that they occur, as it were, in bunches. I am disposed to think that those attacks are sometimes connected with the weight of the atmosphere. There is little doubt that cold tends to hasten the rupture of the enfeebled blood-vessels—rendering the already weakened substance more brittle. But I suspect the pressure of the atmosphere also tends to the same result. There have been very great variations of the mercury in the barometer of late; about a fortnight ago it stood for about twenty-four hours very high, since then it has fallen very low; and during this period the apoplectic fits have been numerous, and this in some measure confirms my opinion that the weight of the atmosphere has very sensible effects in those cases.

I have on more than one occasion mentioned to you how frequent are the instances of the heart becoming chronically affected by acute rheumatism. It was an interesting part of the history of this case, that she had had acute rheumatism in her youth, and thereafter shortness of breath. Let us, therefore, look to the state of her heart, and here you find enough to corroborate our previous observations, as well as to account for the other distressing symptoms which I have before detailed. The heart, you perceive, is large—the left

ventricle is larger and thicker than it ought to be; the edge of the mitral valve is thickened, and I think admitted a slight gurgling of the blood during the systole, and thus the cooing sound already spoken of proceeded from regurgitation through the mitral valve. The pericardium contains a good deal of liquid. Of the reputed connection between disease of the heart and apoplexy, this case hardly presents a fair example. Other cases will afford us means of clearer and more satisfactory observation, and admit of more extended examination of all the phenomena of that disease.

Let us now look to some other patients. There are at present in the house three cases of abdominal tumor; all in women. Their names are Mary Hill, Mary Scammell, and Catherine Tatham. I call your attention now to those cases, that you may watch their progress. They are not perhaps very marked, nor very fruitful in instruction; but this ailment is so common, and generally so trying to medical skill, that I think it most desirable closely to watch every case presented to us. We should hardly expect, until we have been taught by experience, that tumors of the abdomen should be so often obscure and difficult of diagnosis. Yet it is so; very frequently they are extremely obscure, and baffle alike the most accurate inquiry and the most accomplished skill. This obscurity and difficulty may, I think, be explained thus: there are in the abdomen very many organs; of these several lie quite close to each other, and from this juxtaposition may be on external touch mistaken one for the other. Again, many of those organs lie loose in fat, and are subject to be displaced and carried about. Hence, when a tumor makes its appearance, it may be taken for a tumor of the organ whose natural and proper position is in the particular place where the tumor is felt; whereas it may be another and a different organ, which has from some cause come from a distance and displaced the original and rightful occupant of that place.

In Mary Hill's case, the tumor is large, occupying the greater part of the left side of the abdomen. It is dull on percussion, and therefore it does not contain air. On pressing it with the fingers at either extremity, it fluctuates; it therefore contains some liquid. I have set it down as ovarian dropsy. Its appearance, according to her own account, was sudden, and this is very difficult to account for. It occupies the space above the left groin; in that region she had had pain before she perceived the tumor; she suffered from the pain off and on. The swelling, she says, first made its appearance only five weeks before she came to the hospital, and speedily attained the size presented when we saw it. In this, however, I think she is mistaken. People do not usually notice such changes at first—they notice pain, dysuria, and such other circumstances as cause distress, or are at once apparent, but they do not often notice mere alterations in conformation or bulk; and they are apt then first to observe the swelling when increased pain leads to closer examination, and to date the commencement of the disease accordingly. This woman had long been subject to pain in that place, and probably, though unnoticed by her, the tumor had commenced long ago, and was of gradual growth. This tumor is not formed by any part of the bowel—neither is it the

bladder—it is not in the situation of the bladder. When the bladder is distended with urine, the urine dribbles out involuntarily, but on examining there was no dribbling. I was quite satisfied that it was not any affection of the bladder; but to remove the possibility of error on that head, I had the catheter introduced, and by it my previous assurance was confirmed. The circumstances are all such as are found in disease of the ovary, and I have been led to treat it as ovarian dropsy.

Though I have heard of cures of this malady having been effected, I confess I have never been fortunate enough to effect one. However, I feel bound to try the remedies which are said to have been adopted by others with success; but I cannot help, from all circumstances, thinking that in the majority of cases of supposed cure, the ailment has not been ovarian dropsy at all. I remember some time having been consulted respecting a person, who had a tumor on the right side of the abdomen, which his medical adviser had concluded to be enlarged ovary. One day the patient had an excessive alvine discharge, and immediately the swelling was found to have disappeared; it was evidently a case of rather remarkable accumulation in the cœcum, and had yielded to purgatives administered for another purpose. More than one case is on record of the abdomen having been cut into for the purpose of effecting the removal of some matter, which the external tumor was supposed to indicate, but which was then found to have no existence whatever.

Another very interesting case is that of Mary Scammell. She was in the hospital before, having first obtained admission in May last, a few days after a miscarriage in the fourth month of her pregnancy. At that time the placenta adhered to the uterus, and could not be altogether removed by such endeavours as were alone warrantable. She had then much pain and tenderness of the abdomen, extremely sharp and pinched features, feeble and frequent pulse, and great general debility; and we feared much that she was fast sinking into fever. At that time no examination was made through the vagina, for no intermeddling with the vagina would have been then prudent. We kept her quiet, administering only gentle purgatives and opiates. On the 8th of July she had sufficiently rallied to justify the examination before deferred. Accordingly examination per vaginam was made, when the uterus was found enlarged, the os uteri swollen, tender, and hot. She was then cupped, and got saline aperients, with occasional opiates and effervescent medicines—her abdomen being tumid and tender chiefly on the right side. During my temporary absence last summer she left the house, and went subsequently into the asylum at Stoke Newington, where she was again cupped. She has returned to this hospital very much in the same state as when she was last in it. Some of her present symptoms are probably the effects of the pressure of the tumor on the nerves that supply the lower extremities—such as pain in the renal region and down the thigh, with coldness of that foot; she has also frequent discharges—gushes of watery fæces. I do not profess that intimate knowledge of the pathology of the uterus, that I should possess of other parts. But I may say that, perhaps, the retained placenta has been undergoing changes

that create this tumor; perhaps it is degenerating into a species of hydatids.

To one other case I shall this day draw your attention. It is that of the poor woman, to speak to whom I regularly stop when going round, Catherine Tatham. She is forty-three or forty-four years old. I do not strip her to examine or show the abdomen, because it gives her pain, and where no real benefit can be derived from such inspection, we should be careful to avoid inflicting any pain or distress. You have, or most of you have, seen her person already. Her abdomen is immensely distended—indeed incredibly enlarged—solid, and presenting several irregular eminences or projecting bosses; her intestines lie backwards, towards the flanks. The enlargement began five or six years ago, on her left side, low down, with pricking, shooting pains—and from that time she was subject to sickness and vomiting. Three years ago her legs began to swell—doubtlessly, from the pressure of the tumor on the inferior cava, or iliac vessels. This may be a case of ovarian disease. Her general health was not much affected until about a year and a half ago. For the last two years and a half she has had no menstruation; she had been regular before that. Her present condition is most distressing, her breathing is much oppressed, and sharp plunging pains keep her in continual suffering. I regret to say that there is nothing now to be done for her, with any hope. There would be no utility, no propriety, indeed we should not be justified in the use of any expedients, which could only give pain without the possibility of effecting any good. Another ominous fact as regards her is, that her mother is a patient in the cancer ward. This fact, coupled with the plunging pains and the irregularity in the menstruation, increases the probability of her malady being a carcinomatous affection. Whatever it is, it is incurable, and must be fatal. Further light we cannot throw upon it now. Our only duty at present is to alleviate the sufferings of the poor woman, which I have sought to do by opiates—our only hope must be to render as little agonising, as little uncomfortable as possible, the brief span of her existence.

CONTRIBUTIONS.

TO

OPHTHALMIC SURGERY.

By JOHN WALKER, Esq., Manchester.

CATARACT.

Mrs. H., aged seventy-four, consulted me on the 14th of April, 1842. Her vision was at that time so much impaired that she was obliged to be led about, and she was unable to discern anything but a strong light, as that of the candle or fire; she could, however, perceive the motion of the hand when waved before the eyes. She had occasionally suffered rather severely from headache, and was sometimes troubled with a cough, but her health was in other respects usually good.

About eight years since she received a blow over the right eye, and from that time had been unable to see with it. With this eye she could not perceive a lighted candle, when held so close as to be sensible of its heat. This experiment I made very carefully, and

came to the conclusion that this eye was most probably amaurotic. The pupil, however, contracted and dilated with the varying intensity of the light, but less actively than natural, or as compared with the other eye. It was also habitually more contracted than that of the other eye, and was not perfectly circular, being apparently slightly adherent at one point to the capsule of the lens, the capsule being opaque throughout. The vision of this *left* eye had been seriously impaired only during the last year. With this eye, as before stated, she could readily discern a light, and the pupil was very active. The opacity was of a greyish color and evidently seated in the crystalline body, as there was a small transparent space observable behind the iris.

The general appearance of both eyes was healthy, the corneæ rather small, and the anterior chambers not very spacious; the eyebrows being likewise rather prominent and the eyes somewhat sunken, but not to such extent as, in my judgment, to contraindicate the operation of extraction, to which I advised her to submit. Previous to the operation being performed, she was directed to take some aperient medicine, which operated rather freely on the bowels.

April 18. This morning, according to previous arrangement, she was prepared to submit to the operation. She was accordingly placed on a sofa, with the head raised, and I seated myself on a music stool behind her. I commenced with the left eye. The usual incision through the upper half of the cornea was readily effected with my double-edged extraction knife. The curette was next passed into the pupil so as to lacerate the capsule, after which slight pressure with the scoop at the lower portion of the eyeball speedily expelled the opaque crystalline, which was of a decided amber color, and very firm; very little vitreous humor escaped with the lens, but there was a rather free discharge of it shortly afterwards. Two strips of adhesive plaster were laid vertically over the lids, and secured on the brow and face.

Deeming it desirable that she should have a chance for the recovery of both eyes, I, after allowing her a few minutes' repose, proceeded to the operation on the right, although I regarded the result as somewhat doubtful. I made a similar incision in the upper half of the cornea of this eye. Greater irritability on the part of the patient was evinced during this than at the former operation, and the eye rolled upwards and inwards somewhat out of view. A good incision was, however, effected, and the opaque lens escaped immediately on the withdrawal of the knife. The lens was of a deep amber color, rather less than that of the other eye, and discharged with it was a quantity of pultaceous matter, which was probably the outer portion of the lens partially dissolved, probably the result of the injury received eight years before. A membranous substance, being evidently the opaque capsule, was likewise discharged at the same time. Strips of adhesive plaster were then passed over the lids, as in the other eye. No vitreous humor escaped after this operation.

She was directed to remain on the sofa in the recumbent position until towards evening, and then to be removed carefully to bed. As she was occasionally troubled with a cough during the night, a demulcent

mixture, with laudanum, was prescribed to allay any bronchial irritation that might arise.

19. She had some pain in the left eye during yesterday and last night, but it had much abated this morning; there was also some discharge of water from this eye yesterday afternoon, but this too had ceased. The right eye had been very easy. She did not sleep much, but was not teased with coughing during the night. The dressings were not removed.

20. The patient was much the same as yesterday. She complained of pain in the left eye. After the dressings were removed a considerable quantity of mucous discharge was found to have accumulated about the left eye, and a less quantity about the right. There was a considerable amount of intolerance of light, and it was difficult to see the condition of the eyes. The bowels not having acted since the operation, a mild purgative was prescribed. There was no constitutional disturbance, but the cough had been rather troublesome.

21. The left eye was still painful, and there was a small quantity of mucus adherent to the dressings. With the right eye she could distinctly perceive her hand, and there was an entire freedom from pain. The dressings were reapplied.

23. The right eye looked extremely well; no undue vascularity, and no pain. She could open it freely, and distinguish the colors of the bed-clothes, &c. The left eye was much inflamed, and a great deal of mucous discharge exuded when the lids were separated; the lower portion of the cornea appeared clear, but the upper had an opaque and rather sloughy aspect, and the eye continued painful, and unable to bear exposure to light.

It is unnecessary to detail the further progress of the case. The inflammatory condition of the left eye continued for several weeks, and terminated in extensive opacity of the cornea, and partial atrophy of the globe. The right progressively improved, retarded, probably, by the disturbance of the other organ; but very excellent vision was ultimately restored, so that, with the aid of the usual convex spectacles, she was able to read with great fluency.

This case is interesting, as illustrating the uncertainty of diagnosis, and of the result of operations on the visual organ. The eye which, previous to the operation, was regarded as amaurotic, was restored to perfect vision, whilst the other, which appeared so very promising, was destroyed by the subsequent inflammation. No particular reason could be assigned for the bad success of the operation on the left eye, the only difference in the two being that the incision in the left was probably somewhat larger than that of the other. There was also a great discharge of vitreous humor from the left. The uncertainty of any given operation is, to my mind, a strong inducement to prefer operating on both eyes at the same time, as there is then a double chance of success, and at least one may be fairly expected to recover.

FIBRO-SANGUINEOUS TUMOR OF THE DURA MATER.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I beg leave to forward you the following case, which I trust will not be deemed unworthy a place in your Journal.

I am, Gentlemen,

Yours obediently,

T. NEWCOMBE DAY, M.R.C.S.

Kenton, Nov. 24, 1842,

W. B——, a male, aged ten months. About ten weeks since (previous to which time he had been in perfect health and had cut several teeth) a slight enlargement and ecchymosis were observable over the right eye; the enlargement increased rapidly and to such an extent that, eventually, the eye was protruded far out from the bed of the orbit. Shortly after the commencement of disease, other irregular enlargements and ecchymosed masses appeared on the vertex and right side of the head, which was swollen to double its natural size. It was evident, on examination by the hand, which always appeared painful to the child, that the source of the swelling was from within the cranium; nevertheless, during the whole progress of the disease the functions of the body were carried on as if in health—there was nothing like coma, paralysis, or convulsions, or any symptoms indicative of pressure on the brain. The child gradually sunk without any one remarkable symptom, and apparently from exhaustion.

The body was examined about fifty-six hours after death. Its appearance generally, with the exception of the head, was similar to that usually observed in cases of death from profuse hamorrhage, the surface presenting that peculiarly white and waxen appearance so often seen in such cases. On examining the exterior of the head, the tumor was found to have receded somewhat, the scalp being more movable over it than at any time before death.

The interior of the head was examined by carrying an incision from behind the ear of one side across the head to the corresponding point on the opposite side; this divided the scalp, the two portions of which were reflected, the one anteriorly and the other posteriorly, in the usual manner, and found, with the exception of one small spot of about the size of a shilling, to have no connection whatever with the growth below, a layer of cellular tissue being interposed; this connection, however, was not, strictly speaking, with the substance of the tumor, but with the upper surface of the pericranium which closely invested it; it appeared to be the result of adhesive inflammation. By this dissection, that portion of the tumor occupying the upper and posterior part of the head was brought distinctly into view; it evidently came from beneath the cranium, and had pushed itself up through the posterior fontanelle, where it had caused a conical projection, as well as through the posterior half of the sagittal suture, the space between the two parietal bones being fully an inch in width; the bones themselves were also considerably raised by the upward pressure of the tumor, which was of a uniformly dark color, as if containing blood; it was, however, very

firmly bound down by the pericranium, which was stretched very tightly over it, and formed, in fact, its investing membrane, being raised at least an inch from off the cranial bones; it appeared to have given much resistance to the progress of the tumor, as it was somewhat more dense in its structure than natural, but did not at any point present an appearance of giving way from the continued pressure on its under surface; there was, however, as already mentioned, a connection at one small spot between it and the scalp. On endeavouring to turn off this membrane, it was found to be connected with numerous fibres, similar to those which enter into the structure of a fibrous membrane, which passed up at different points through the tumor from its base, and became connected with the under surface of the pericranium. The tumor itself now appeared to be made up entirely of blood, which was not confined within any cells or cysts, but simply diffused, in a semicoagulated state, of a chocolate color, and breaking down readily under the finger.

There was no appearance of fungous or other morbid growth, the tumor being made up entirely of blood, as just described, with the exception only of the fibres already mentioned; these, on being traced back, were found to originate in the upper rough surface of the dura mater, from which they arose in a very thick cluster, and with which they were firmly connected, as the half coagulated blood could be readily scraped off them with the scalpel, so as to allow of their being very easily traced and examined; many of them were short and thick, extending only a short distance, whilst others, which were longer and more slender, radiated in all directions, and became, the greater number of them, attached, as before stated, to the pericranium.

The dura mater, on being turned off the brain, was found perfectly healthy on its under surface, presenting everywhere the natural smooth surface given it by the arachnoid; there was no separation of its layers at any one point, and the natural connection between it and the skull was done away with only in those situations where the tumors had interposed themselves between the bones and this membrane. The brain itself was also perfectly healthy throughout, but, from being compressed, was greatly mis-shapen, the middle lobe of the right side being pressed down at least two inches below the level of that of the opposite side; there was about an ounce of fluid at the base of the skull, but this appeared to have escaped from the ventricles, and not to have been the result of any previous inflammation.

A tumor of the same kind as that just described, passed between the dura mater and bones at the base of the skull, occupying the inferior fossæ of the occipital bone, and a third, connected with the first, pressed forward over the right side of the head, but under the cranial bones (between them and the dura mater) to the orbit, the roof of which it caused to protrude somewhat, at the same time that it pressed down upon the eye so firmly as to push it out of its proper position downwards and forwards upon the face, and, had the child lived much longer, would have caused, in all probability, the whole globe to slough out, as destruction of the different tissues of the eye had commenced from pressure a day or two previous to the child's death. Both these tumors

arose, like the first, from the exterior of the dura mater, between which and the inner surface of the bones they were situated, but did not, like the first, pass in part between the bones, and raise the pericranium from off them.

The inner surface of the cranial bones, wherever the tumor had come in contact with it, was roughened by the absorption of the inner table; the two portions of the frontal bone were not united in the mesial line, the growth from beneath preventing their opposed edges coming in contact. No other region of the body was examined.

REMARKS.

It is somewhat difficult to determine the true origin and nature of the adventitious deposit exposed in this dissection. It is evidently not capable of being referred to fungoid or other malignant growths, nor, from the absence of anything like a sac, can it be viewed as aneurismal; nor as having its origin in aneurism by anastomosis from the entire absence of any cellular or tubulated structure throughout the various masses.

Are we, then, to view it as a disease of the dura mater, or as the effect of sanguineous effusion simply? From the strong and uniform adhesion of the fibres to the dura mater, both Andral and Dr. Bright would evidently refer it to disease of this membrane.

Dr. Bright, in describing some fibrous tumors connected with the dura mater, says they are very different from the fungoid tumors which appear to be connected with the arachnoid of the dura mater; they arise from the structure of the dura mater itself, with which they are intimately joined, and from which they are inseparable, without tearing the membrane. Andral mentions a case (in a man aged sixty-one) of fibrous vegetation on the inner surface of the dura mater, the post-mortem examination of which is worth quoting here. "On raising the vault of the cranium, no appreciable lesion on the external surface of the dura mater. On making an incision, however, into it, this membrane was found to have contracted unusual adhesions to the subjacent parts. These adhesions were formed by cellular bands, which united the two layers of the arachnoid to each other. These bands circumscribed a spherical body of the size of a large nut, which sank deep into the cerebral substance, with which it has not contracted adhesion in any other part. It was separated from it by a cellulo-vascular layer, which appeared to be the tissue of the arachnoid and pia mater compressed by it. This body was attached by a narrow pedicle to the dura mater, the fibres of the latter membrane being dispersed over the pedicle of the tumor, and so confounded with its tissue that to distinguish them was impossible. This tissue, which was of considerable hardness, and of a white tendinous appearance, consisted of fibres which were, as it were, wound up one upon another; they seemed a prolongation of the fibres of the dura mater." In commenting upon this and a case somewhat similar, Andral observes that these tumors had a texture analogous to that of the dura mater itself. One of them was constituted exclusively of fibrous tissue. In the other there was mixed with this fibrous tissue a certain quantity of ossiform matter. Both these abnormal products bore a strong resemblance to the fibrous bodies of the uterus. In the two cases

the nervous substance was rather wasted than compressed, where it was in contact with the tumors. In one of these cases we could not refer the disease of the dura mater to any appreciable cause. In the other, it was after external violence inflicted on the occipital region, that the tentorium cerebelli became the seat of the osteo-fibrous vegetation already described. Here, then, is one of those cases wherein we must have recourse to the existence of a disposition altogether peculiar, in order to explain those infinitely varied lesions which one and the same cause is capable of producing.

From the mass consisting of so large a proportion of blood, I am, however, inclined to think the origin of the deposit, in the case now under consideration, due to sanguineous effusion, and that the formation of the fibres and their adhesions to the dura mater and pericranium were subsequent, and consequent upon it. This fibrous, and, as it may be termed, "analogous structure" of the deposit, is to be explained by the ordinary phenomena of the conversion of the fibrine of the blood into fibre; for on the coagulation of the blood the plastic properties of its fibrine become manifest, whereby it assumes almost from the commencement a laminated or fibriform arrangement. The adhesion of these fibres to the dura mater and to the pericranium is also referable to the tendency which exists in fibrine to escape towards, and accumulate at, the circumference of the coagulum, and to place itself in contact with the living tissues which surround the coagulum.

CASE OF CHOLERA MORBUS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you deem the following case of cholera at all interesting, in a practical point of view, I beg you will give it insertion in the "Provincial Medical Journal."

Yours obediently,

AN EXTRA LICENTATE.

Sidmouth, November 14, 1842.

Ann Nash, aged thirty, had been cook in a gentleman's family, but was obliged to leave from ill health, generally complaining of pain in the side and chest, with occasional palpitation of the heart. She was taken suddenly ill at her brother's house (some little distance from her own) on Tuesday night last, or rather, early on Wednesday morning, August 31, with violent pain in her bowels, which was speedily followed by vomiting and purging; but instead of fluid resembling rice gruel, a great quantity of dark blood, about one quart, was ejected from the stomach, un-mixed with food, and a larger quantity passed the bowels, with some most offensive fæculent matter. She was immediately assisted to her own home. I did not see her till nearly eleven, a.m., more than six hours from the time she was attacked; I found her suffering from the following symptoms (on inquiring, I could not ascertain that she had been eating anything the day before which would be likely to disagree with the stomach):—The legs drawn up,

with very severe cramp; violent and continual pains in the epigastric region; skin of a livid and slightly blue color, covered with a cold, clammy perspiration; tongue white; thirst extreme; pulse about 45, and fluttering; great depression and anxiety of countenance, with sunken eyes. The following was immediately ordered:—One large tablespoonful of brandy in half a cup of arrow-root every half hour; with—

Calomel, four grains;

Opium, four grains;

Aromatic confection, sufficient to form into four pills. Take one every three hours.

Legs to be tightly bandaged.

Evening: She still vomits a small quantity of blood; excruciating pain in right side; not able to bear the least pressure, or take a slight inspiration. Mustard poultice ordered to the side immediately, and kept on for an hour; when removed, warm flannels to be applied; then one wineglass of brandy was given, from extreme exhaustion. Pain in legs worse; right hand seized with cramp; her groans were heard in the street, from the extreme pain she was then suffering.

Nine o'clock. Pain in right side relieved; the left was now affected, extending over the region of the stomach. Another poultice applied similar to the last; pills to be continued, with three tablespoonfuls of the following mixture in lemon juice:—

Camphor mixture, six ounces;

Carbonate of ammonia, twenty-four grains;

Spirit of nitrous æther, three drachms;

Syrup of poppies, two drachms.

Vomiting still continues, but only the brandy and water she had been taking; bowels slightly moved; discharge very offensive; has not passed any water for twenty hours; great thirst. To take during the night brandy with arrow-root, as before ordered; toast and water.

September 1, Ten, a.m. Passed a restless night; still vomiting; bowels not open; great pain in legs; poultice relieved pain in side and stomach; pulse 40, fluttering; tongue rather dry, probably from the effect of the opium; pains in the head and eyes; slight perspiration over the whole body; reaction had in some degree taken place. Continue the pills during the day, with an enema of gruel. Take arrow-root and brandy. *Evening*, nine o'clock: Bowels acted once; fæces very offensive, and slightly tinged with blood; occasional vomiting. Being anxious to keep the stomach in a tranquil state, I ordered only an injection with gruel and oil to be given. A very small quantity of urine passed, attended with a great deal of smarting pain. Should vomiting to any extent return, forty drops of tincture of opium were left, and ordered to be given in brandy and water. Head to be kept wet constantly with vinegar and water.

2, Ten, a.m. Some little sleep during the night; occasional vomiting; did not take the drops; bowels only open once from two enemas; pain in sides and chest better; cramp in legs less, but very sore on being rubbed; pulse 40; tongue rather dry; circulation better; slight perspiration; passed about half a pint of high colored urine; took some mutton broth, which remained on the stomach; complains of great hardness about the bowels, and tenderness on pressure, with a feeling that, if they were freely evacuated,

relief would be immediately felt. Ordered the following:—

Infusion of senna, six ounces;
Carbonate of potass, one drachm;
Sulphate of magnesia, one ounce;
Spirit of nitrous æther, three drachms;
Tincture of ginger, half an ounce. To have three tablespoonfuls every four hours, until full evacuation of the bowels is produced.

Two tablespoonfuls of the following, after the bowels had been freely opened, and repeated every four hours:—

Camphor mixture, six ounces;
Compound spirit of ammonia, two drachms;
Tincture of hyoscyamus, two drachms.

In case it should be necessary, another enema. Take during the day broth, arrow-root with brandy, frequently, and small in quantity. Since last evening a very decided and marked improvement in her symptoms has taken place, which I attribute to her having had two hours' quiet sleep during the night; there is more vigor and animation in the countenance. *Evening*: As the medicine acted very freely, bringing off a quantity of dark fæculent matter, and causing at the same time great pain, accompanied by debility, I ordered a saline draught, with thirty drops of opium, at once.

3. Passed a tranquil night; not any return of pain; pulse 60; tongue cleaner. Mutton broth taken occasionally; saline mixture every six hours; enema of oil and gruel if necessary.

4. Passed a comfortable night, without sickness; bowels open twice since yesterday. Saline mixture to be continued, and an aperient during the day if requisite. Pulse 65; tongue clean and moist. Beef tea frequently, and in small quantity.

5. Slept very comfortably during the night; no return of pain; catamenia returned yesterday morning very scanty, left her last evening. Repeat saline mixture and aperient, with mutton broth.

6. Still improving; pain entirely gone; bowels rather inclined to be costive; appetite returning; legs still sore when rubbed. Bowels to be kept open by taking some of the aperient mixture occasionally, and one of the following pills three times a-day:—

Sulphate of quinine, twelve grains;
Rhubarb, one scruple;
Compound extract of gentian, ten grains. Make twelve pills.

8. Free from pain; bowels open; secretions healthy; in every respect better; eat some boiled mutton with a relish. She is now quite well. The state of the secretions in this case indicated very great hepatic derangement and congestion, and to congestion I should attribute the hæmorrhage.

ON THE USE OF THE SPECULUM IN UTERINE DISEASES.

By JAMES COLES PARKER, Esq.,
Surgeon to the Bridgwater Infirmary.

I am induced to send the present communication to the "Provincial Medical Journal," not with the object of proposing any new mode of treatment, but to

recommend to those practitioners who have not yet been in the habit of using the speculum uteri in the above diseases, its immediate adoption.

Three cases of uterine disease have lately been under my care, two organic and one functional, which had existed for many months; each had been under the care of highly respectable surgeons, both in town and country, and in neither case had the speculum been used; hence, advantage had not been taken of that means of diagnosis, valuable time had been lost not to be regained, and the local affection had been so long neglected in the two cases of organic disease, that constitutional symptoms supervened, which in one case will be fatal.

One of the most valuable uses to which the speculum is applicable is the ready means it affords for the application of leeches to the os and cervix uteri; the advantages of this mode over that usually adopted—viz., application to the perineum, inside of the thighs, or pubis, are too evident to need any remarks from me; it enables us to avail ourselves of the direct application of remedies to the diseased part, and it should be borne in mind that the os and cervix uteri are the parts which in most cases of organic uterine disease are first affected. In functional affections of the uterus, which are so frequent, depending on inflammatory action or congestion, the application of leeches by the speculum is, in my opinion, a most valuable remedy.

I will not trouble you with the minute detail of the cases above alluded to, but it will be sufficient to say that each case had existed for many months, without the practitioners under whose care they had been previously having used any local means which were at all effectual, in consequence of having neglected the use of the above-named valuable instrument; two of the cases have been since cured, and the sufferings of the other patient so much alleviated, that she speaks in terms of gratitude of the relief she has experienced from the use of leeches and other local remedies to the diseased part. The speculum I would recommend is the three-bladed one made by Weiss, which appears to have many advantages over Ricord's, or any other which I have seen.

Eastover, Bridgwater,
Nov. 24, 1842.

CASE OF UNIVERSAL SUPPURATION OF THE CEREBRO-SPINAL MEMBRANES, WITHOUT ANY CORRESPONDING SYMPTOMS.

By Professor WAGNER, Vienna.

Jacob Eichinger, a soldier in the 4th Light Infantry Regiment, had enjoyed good health during the seven years that he had been in the service. On the 17th of November, 1839, he was suddenly attacked with symptoms of gastric derangement, which increased on the following day, and compelled him to go to bed, at about a quarter to twelve, a.m. He fell asleep, and awoke in an hour delirious. Convulsions soon supervened; the man became comatose, and, although the most active antiphlogistic treatment was had recourse

to, he died on the following day, November 19th, at half-past four in the morning.

The body was examined on the 20th. The cranial bones were remarkably thin, and the right side of the skull somewhat prominent. The whole of the superior surface of the cerebral hemispheres was covered with a layer of yellow fluid pus, and appeared somewhat flattened; no trace of the arachnoid could be found at this part. The pia mater was highly congested, and infiltrated with pus in its prolongations between the convolutions; the substance of the hemispheres was very much softened, and contained numerous points of blood when cut through; the lateral ventricles empty, and their walls softened in the highest degree; the pineal gland was very much enlarged, and did not contain any calcareous matter. The inferior surface of the cerebrum, and the whole of the cerebellum, were covered with pus, and extremely soft; the arachnoid here also appeared to have been destroyed; the base of the cranium was bathed in pus; no fluid in the third or fourth ventricles; the pineal gland much injected. The inner surface of the trachea was of a light red color, but the bronchi were healthy. There were some adhesions between the pleuræ, and the substance of the lungs was much congested; a few tubercles in the upper part of the left lung. The heart was very large, soft, and loaded with fat, but not diseased. In the abdominal cavity nothing worthy of notice was found. The bladder contained about half a pint of turbid urine. The fibrous membrane of the spinal marrow was much injected, and the cellular membrane particularly so; its whole surface, and especially opposite the cauda equina, was bathed in the same kind of purulent matter as the brain; there was no trace of the serous membrane, and the substance of the spinal marrow itself was converted into a thin, pulraceous matter.

REMARKS.

This remarkable case is almost unique in the annals of medical science. Pathologists must decide whether the inflammation commenced in the arachnoid membrane, or extended to it from the softened nervous tissue, or whether both states were simultaneously produced by one and the same cause. But, however this may be, we cannot but be struck with surprise that such extensive softening of the cerebro-spinal nervous mass, and universal suppuration of its serous membrane, should have existed without the production of any symptoms to indicate such extensive disease. Particular inquiries were made in the regiment in which the man had served, and it was ascertained that during the seven previous years he had enjoyed excellent health, having continued to do his duty as a soldier without interruption. It was only two days before his decease that gastric and convulsive symptoms made their appearance, and quickly terminated in coma and death.—*Ostr. Med. Woch.*, Nov. 4, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, DECEMBER 3, 1842.

The condition of the dwelling-houses of the poorer classes, whether as regards their internal economy or external situation, forms a most important object of inquiry to the philanthropist and the physician. When we reflect upon the influence which the varying circumstances of site and elevation, and exposure to air and moisture, must exercise upon the health and comfort of the artisan and the cottager—when it is considered that the free circulation of air, the access of light, and protection from cold and damp, and from noxious exhalations and impurities, whether of the air respired or the water employed in the various branches of domestic economy, are important to all, but doubly so to those who are from poverty deprived of the means of guarding against many of the inlets to disease—there is little need of labored argument to show the importance of such inquiries. No reflecting person, who is conversant with the habits, and, from personal inspection, familiar with the dwellings of the working population of this country, will hesitate to admit that there is great room for improvement in both. The site of the houses of the manufacturing portion of our population, in particular, has been too generally chosen with reference to the one only view of proximity to the factory, regardless alike of the comfort and the health of the inmates. These houses are for the most part situated in the midst of the noxious effluvia generated by the various processes carried on at the manufactory, because it is considered advantageous that the workmen should be near at hand; they are crowded into a small space, the value of the ground not allowing of sufficient room for much attention to ventilation, or to the admission of light. The banks of rivers and canals being desirable situations for factories, as well on account of the supply of water for working the machinery, as for the convenience of transporting the products of labor, the ground is very frequently swampy, and drainage, or other means of providing against accumulation of dirt and filth, rarely enters into the contemplation either of owner or occupier of the miserable tenements with which such places abound. Can it then be a matter of surprise that the population reared under such circumstances should be squalid, stunted in growth, scrofulous in constitution, and careless of those decencies of every-day life in the absence of which there is no check to the development of vicious tastes, no impediment to the indulgence of vicious appetites? Can it be a matter of surprise that in such places scrofula, pulmonic affections, and rheumatism are endemic, and that fever and scarlatina, cholera, diarrhœa, and

dysentery, are frequent in their visitations and assume their most fearful and fatal characters?

In turning over the pages of Mr. Chadwick's report, numerous examples both of the wretched condition of the laboring poor as to external circumstances, and of the necessary consequences of this condition, force themselves on our notice. These are, however, only selections from the mass of evidence afforded by the medical correspondents of the poor-law commission, to whose able communications the report owes so much of its value. We have before had occasion to refer to the condition of the lowest class of the inhabitants in Liverpool, Manchester, and other large towns. In one of the earlier numbers of this Journal our readers will find accounts of the destitution and misery of large numbers of our fellow-creatures, which it is in the highest degree painful to contemplate. The parliamentary report on the health of towns contains authentic statements, delivered before a committee of the House of Commons by competent and intelligent witnesses, of such a character as to compel public attention to the details there brought forward; and it is not too much to say, that it is to the valuable evidence given by Dr. Arnott, Dr. Duncan, Dr. Lynch, and the other medical witnesses examined by this committee, that we shall owe whatever of benefit may be worked out by the present inquiry on the part of the poor-law commission. The evidence of Dr. Duncan, as to the condition of the poorer classes of inhabitants in Liverpool, is well borne out by the reports furnished to the poor-law authorities by their own medical officers of the condition of the laboring population of the suburbs and surrounding country. "The cottages," says one of these gentlemen attached to the West Derby union, whose name, however, has for some reason been withheld, "are in general built more with a view to the per centage of the landlord than to the accommodation of the poor. The joiner's work is ill performed; admitting by the doors, windows, and even floors, air in abundance, which, however, in many cases, is not disadvantageous to the inmates. The houses generally consist of three apartments—viz, the day-room, into which the street-door opens, and two bed-rooms, one above the other. There is likewise beneath the day-room a cellar, let off either by the landlord or tenant of the house to a more improvident class of laborers; which cellar, in almost all cases, is small and damp, and often crowded with inhabitants to excess. These cellars are, in my opinion, the source of many diseases, particularly catarrh, rheumatic affections, and tedious cases of typhus mitior, which, owing to the overcrowded state of the apartment, occasionally pass into typhus gravior. I need scarcely add that the furniture and bedding are in keeping with the miserable inmates. The rooms above the day-room are often let separately by the tenant to lodgers, varying in

number from one or two, to six or eight individuals in each, their slovenly habits, indolence, and consequent accumulation of filth, go far to promote the prevalence of contagious and infectious diseases. The houses already alluded to front the street, but there are houses in back courts still more unfavorably placed, which have also their cellars, and their tenants, of a description worse, if possible. There is commonly only one receptacle for refuse in a court of eight, or ten, or twelve, densely-crowded houses. In the year 1836-7, I attended a family of thirteen, twelve of whom had typhus fever, without a bed in the cellar, without straw or timber shavings—frequent substitutes. They lay on the floor, and so crowded, that I could scarcely pass between them. In another house I attended fourteen patients; there were only two beds in the house. All the patients, as lodgers, lay on the boards, and during their illness, never had their clothes off. I met with many cases in similar conditions, yet, amidst the greatest destitution and want of domestic comfort, I have never heard during the course of twelve years' practice, a complaint of inconvenient accommodation."

Similar evidence is given as to the state of the working population in districts situated in the vicinity of Stockport, Wigan, and other towns in the North. "It is impossible," states Mr. Atkinson, of Gateshead, "to give a proper representation of the wretched state of many of the inhabitants of the indigent class, situated in the confined streets called Pipewellgate and Killgate, which are kept in a most filthy state, and to a stranger would appear inimical to the existence of human beings; where each small, ill-ventilated apartment of the house contained a family with lodgers in number from seven to nine, and seldom more than two beds for the whole." "The writer had occasion a short time ago to visit a person ill of the cholera; his lodgings were in a room of a miserable house situated in the very filthiest part of Pipewellgate, divided into six apartments, and occupied by different families to the number of twenty-six persons in all. The room contained three wretched beds, with two persons sleeping in each; it measured about twelve feet in length and seven in breadth, and its greatest height would not admit of a person's standing erect; it received light from a small window, the sash of which was fixed. Two of the number lay ill of the cholera, and the rest appeared afraid of the admission of pure air, having carefully closed up the broken panes with plugs of old linen."

Still more wretched, if possible, is the state of the poor of the manufacturing towns in Scotland. Mr. Chadwick, it appears, personally visited Glasgow, and, together with Drs. Arnott and Alison and the late Dr. Cowan, inspected the wynds, narrow streets, and courts of that city. The details of what they witnessed are almost too disgusting to be cited; but after

wading through filth of every description on the exterior of these crowded dwellings, we find Dr. Arnott saying, "The interior of these houses and their inmates corresponded with the exteriors. We saw half-dressed wretches crowding together to be warm; and in one bed, although in the middle of the day, several women were imprisoned under a blanket, because, as many others who had on their backs all the articles of dress that belonged to the party were then out of doors in the streets."

We find another authority, Mr. J. C. Symonds, who was appointed by the Government to examine into the condition of the hand-loom weavers, making the following statement:—"The wynds in Glasgow comprise a fluctuating population of 15,000 to 30,000 persons. This quarter consists of a labyrinth of lanes, out of which numberless entrances lead into small courts, each with a dung-hill reeking in the centre. Revolting as was the outward appearance of these places, I was little prepared for the filth and destitution within. In some of these lodging rooms (visited at night), we found a whole lair of human beings littered on the floor, sometimes fifteen and twenty, some clothed, and some naked; men, women, and children, huddled promiscuously together. Their bed consisted of musty straw intermixed with rags. There was generally little or no furniture in these places; the sole article of comfort was a fire. Thieving and prostitution constitute the main sources of the revenue of this population. No pains seem to be taken to purge this Augean pandemonium—this nucleus of crime, filth, and pestilence, in the centre of the second city of the empire."

From one such locality as this here described, 754, of about 5,000 cases of fever which occurred in the year 1839, were carried to the hospitals. "Of the dreadful danger of such a state of things," says Mr. A. Alison, in his able work on the Principles of Population, and their Connection with Human Happiness, "and the manner in which it speedily comes to affect the higher orders in their lives and property, if they cannot be reached through any other and more honorable channel, decisive proof is afforded by the facts that no less than *twenty thousand* persons were seized with typhus fever, the well-known attendant on want and misery in Glasgow, in the single year of 1839, of whom 2,180 died; that 40,000 persons have had fever in that city within the last three years; that 10,000 persons have had fever in Dundee in the last four years; that, in 1838, one in thirty in Edinburgh was a fever patient." Now to turn to the effects of such a state upon the duration of life, it is sufficient to say that the average annual mortality in Glasgow, in 1822, was 1 in 41; in 1835, 1 in 29.53; in 1836, 1 in 26.68; in 1837, 1 in 24.20. (See Br. and For. Med. Rev. for Oct., p. 456.)

These statements, however, are not confined to the

reports from the northern districts. The western, eastern, and midland portions of the kingdom furnish instances of the wretched condition of the habitations of the poorer classes, equally instructive and equally calling for attention and amelioration. Even the immediate vicinity of royalty itself is not exempt from this calamitous state of the laboring population. Let us hear the report of Mr. Assistant-commissioner Parker:—

"Extensive as the improvements in the state of the drainage of almost every town in these counties (Buckingham, Oxford, and Berks) might be, there is no town amongst them in which there is so wide a field for improvement as Windsor, which, from the contiguity of the palace, the wealth of the inhabitants, and the situation, might have been expected to be superior in this respect to any other provincial town. Such, however, is not the case; for of all the towns visited by me, Windsor is the worst beyond all comparison. From the gas works at the end of George-street a double line of open, deep, black, and stagnant ditches extends to Clewer-lane. From these ditches an intolerable stench is perpetually arising, and produces fever of a severe character. I visited a cottage in Clewer-lane in which typhus fever had existed for some time, and learnt from a woman who had recently lost a child, the complaint was attributable to the state of these ditches. Mr. Bailey, the relieving officer, informs me that cases of typhus fever are frequent in the neighbourhood; and observes that there are now seven or eight persons attacked by typhus in Charles-street, and South-place. He considers the neighbourhood of Garden-court in almost the same condition. 'There is a drain,' he says, 'running from the barracks into the Thames across the Long-walk. That drain is almost as offensive as the black ditches extending to Clewer-lane. The openings to the sewers in Windsor are exceedingly offensive in hot weather. The town is not well supplied with water, and the drainage is very defective.' The ditches of which I have spoken are sometimes emptied by carts; and on the last occasion their contents were purchased for the sum of fifteen pounds, by the occupier of land in the parish of Clewer, whose meadow suffered from the extraordinary strength of the manure, which was used without previous preparation."

Now we cannot but think that the removal of such nuisances, generative as it would seem of severe and dangerous fever, existing in the immediate neighbourhood of the court, is to the full as important in a political point of view as the support of that court in the splendour and magnificence which is fitting, and we should prefer seeing a portion of the public funds, so largely drawn upon for this latter purpose, appropriated rather to the rendering the royal residences abodes from which every source of contagious or endemic disease was as far removed as possible.

Doubtless, too, the honor of the nation is materially concerned in providing for the health and comfort of all classes of its population, and it will scarcely admit of question that the large sums raised and expended to support the honor and dignity of the British name in Syria, Canada, China, Afghanistan, and every other quarter of the habitable globe, might be at least equally well bestowed in improving the condition and adding to the comforts of the artisan and laborer among our home population.

Not long ago a piece of domestic oppression came to our notice which, had the poor-law commission been what it ought to be, would have called for a little interference on their part, possibly also the expenditure of a few shillings weekly by the parochial authorities, quite as much as the undertaking of a distant war on the part of the nation, and a considerable expenditure of life and treasure to compel the subjects of a foreign country to receive opium at our hands to the manifest injury of their health and morals. In the case we allude to, a delicate female, threatened with consumption, was compelled to change her habitation in an open and well ventilated part of a manufacturing town for one confined, dark, damp, and chill, one small upstairs room alone being in any way habitable, because the master manufacturer who employed her husband had this tenement unoccupied. Work was short, and if the poor man refused to immure himself, his wife, and child therein, he was threatened with the loss of the scanty measure of employment, which was all he had to depend upon. The consequence is confirmed consumption in the case of the poor woman, and certain loss of life at no distant period, with all the accompanying domestic afflictions, to the husband, and the worst of all bereavements to the infant. Is this a solitary instance? We know that very many such might be adduced, and the providing of some remedy for such a state, the enactment of some general provision by which the habitations of the poor may be rendered as far as practicable free from all extraneous sources of disease, and the rendering the poor-law protective of their interests rather than oppressive to them in their calamities, would be a wreath of honor to the statesman who should effect such a genuine reform, which would cast into shade all the laurels which the most splendid successes of whatever kind could bestow.

WESTMINSTER HOSPITAL.

A vacancy will, we understand, soon occur in the office of physician to this hospital, by the retirement of Dr. Burne. We should not have alluded to Dr. Burne's retirement, which has not been officially announced, had we not seen an unusual sort of "feeler" put forth by the friends of Dr. Basham on the expected vacancy.

REVIEWS.

A Manual of Diseases of the Skin, from the French of MM. Cazenave and Schedel, with Notes and Additions. By THOMAS H. BURGESS, M.D, Surgeon to the Blenheim-street Dispensary for Diseases of the Skin. 8vo, pp. 320. London: Henry Renshaw.

All of our readers who cultivate acquaintance with French medical literature must be familiar with the original of the volume now before us. It has for several years past been considered a standard work on diseases of the skin; indeed, up to the present date it is unrivalled in point of accuracy of description and clearness and conciseness of style—qualities of no mean importance in a treatise on cutaneous pathology. The "*Abrégé Pratique*" of MM. Cazenave and Schedel was written under the most favorable circumstances. The authors were for a long period *internes* at the Hospital of St. Louis, under M. Biett, where they had opportunities which fall to the lot of few, of seeing, and comparing with the descriptions set down in books, the different diseases of the skin in every variety and in every form. They had, moreover, the admirable oral discourses of M. Biett to guide them in their studies from nature, and thus, with so many elements of success ready placed before them, it is not surprising that their descriptions of cutaneous disease should bear the impress of truth and accuracy. The Hospital of St. Louis affords facilities for studying diseases of the skin which are unequalled by any other medical institution in Europe. Indeed, it is *unique* of its kind. We know of no other establishment of a similar nature in which several hundred beds are devoted exclusively to skin affections, to say nothing of the crowds of out-patients by whom the doors of the hospital are beset every week. If we have cause to regret that the eminent dermatologist who had the care of that excellent institution for a long series of years has not himself written on a subject which he understood so well, we have the satisfaction to know that the work of his pupil and successor, M. Cazenave, contains a faithful exposition of his views and extensive experience in dermoid pathology.

After exposing the fallacy of various classifications which have been advanced from time to time by different writers on cutaneous affections, the authors proceed to show that the arrangement of Willan is by far the most correct of all that have been published, and adopt it accordingly for the groundwork of their manual, with some alterations made at the suggestion of M. Biett. They very justly reprehend the system of multiplying classifications, the invariable result of which is confusion and mystification; hence they chose rather to adopt that which they found to be the most accurate, the most simple, and the best known, with the modifications above-mentioned, than to add to the confusion already existing by writing a new one.

The differential diagnosis of diseases of the skin is, as every one who has studied that branch of pathology must be aware, one of the most important points connected with their history. It is also the greatest

stumbling-block which the young practitioner meets with in treating skin affections; and it is clear that until he ascertains correctly the nature of the particular eruption under his care, and the class of diseases to which it belongs, his treatment must be inefficacious, and may even become injurious. Under this head the authors lay down some excellent practical rules and instructions for the guidance of the uninitiated, which we cannot do better than quote here:—

“The chief point is to determine the elementary lesion; this done, we have merely to compare the disease with the few which possess the same elementary characters. In cases where the elementary lesion remains unaltered, we have simply to ascertain whether it be a papule, vesicle, scale, &c., and this generally is a very easy task. Our next step is to determine the species, and in this we are aided by the *form*, *seat*, *progress*, &c., of the eruption.

For example, a patient has, on the inner side of the arm, between the fingers, &c., a number of *small collections of serum*, distinct, acuminate, transparent, at the point, and accompanied by itching, &c. On carefully examining, we find that the elevations contain no pus, that they are not solid and resisting, that they are not papular eminences covered by a scale, nor an injection of the skin which disappears under pressure; the disease is, therefore, *vesicular*. We have then to find out to what species of vesicular affection it belongs. It is neither *miliaria* nor *varicella*, which are accompanied by constitutional symptoms; it is not *herpes*, for in herpes the eminences are collected together in groups; it must therefore be either eczema or scabies; but it is not eczema, for the vesicles of eczema are flattened, while here they are acuminate; *ergo*, it is scabies.”

But, as the authors judiciously observe, a mere knowledge of the elementary character of a cutaneous disease is not alone sufficient for its diagnosis; this character may have disappeared, and given place to the secondary or consecutive lesions. The fluid of a vesicle may, for example, dry off and leave a small incrustation; a pustule may be converted into a scab, and the latter give way to an ulcer; hence it is necessary that we should study these secondary lesions, and know to what primary characters they correspond. Incrustations may succeed vesicles; scabs occur in most pustular diseases, and ulceration may be a consequence of rupia, ecthyma, &c.

“In cases like the foregoing (the authors remark), we must first ascertain the nature of the secondary lesion, then determine its corresponding primary element, and finally pursue the course just pointed out. For example, a patient comes to us with a disease of the skin, characterised by thick, rough, yellow scabs, which cover a large portion of the extremities, especially the legs, and when they fall off, expose superficial excoriations; the latter discharge a purulent secretion, which dries up, and forms fresh scabs, these being the most characteristic features of the disease. Now it is easy enough to tell at once that this is a pustular affection, but not so easy to determine its species. The disease is evidently neither *variola* nor *vaccinia*; the pustules of *ecthyma* are large, isolated, and frequently covered by black, tenacious scabs, which end in ulceration; it is neither *acne* nor *mentagra*, the pustules of which rarely ever give rise to scabs. The only affections, then, that remain are *impetigo* and *porrigo*, and we have merely to compare the character of these two species in order to decide. It is unnecessary to enumerate here the signs by which we know that the disease is not *porrigo*; it is

therefore *impetigo*, and as the scabs are scattered irregularly over the limb, it is *impetigo sparsa*.

The reader cannot fail to observe the clearness and vividness of these remarks. They convey to the mind at once and distinctly the intended information. There is no obscurity of meaning or *verbiage*—vices of style which too frequently abound in treatises on cutaneous diseases. This is but a sample, but the same perspicuity and lucid order pervades the work throughout. As the Manual was intended to be an essentially practical compendium of the subject of which it treats, the authors excuse themselves for not introducing any theoretical speculations on the anatomy of the skin, especially as the present state of our knowledge of the intimate structure of that tissue is too obscure and immature to admit of laying down precise and lasting distinctions as to the seat of cutaneous diseases.

The introduction is principally occupied with general observations on the causes, diagnosis, prognosis, and treatment of skin affections, and gives an excellent bird's-eye view of every point of importance connected with the history of this interesting family of diseases. Under the head of “Treatment,” the authors claim for M. Bielt, and justly so, the merit of having exploded the chance-medley system of treatment of the old school, and also of having, by careful observations, and through the means of a complete series of experiments with different remedies, ascertained those which were really of any value, from the host of empirical and useless nostrums that were hitherto in vogue both in the profession and out of it. They also indignantly complain of the ungenerous manner in which the results of M. Bielt's researches and experience have been adapted by other writers on cutaneous pathology, without acknowledgment, and put forth as their own, and we regret to say that the most barefaced of these larcenies has issued from the English press.

The body of the work consists of two parts. The first contains eight principal orders—viz., Exanthemata, Vesiculæ, Bullæ, Pustulæ, Papulæ, Squamæ, Tubercula, and Maculæ. The second includes the following additional orders, which do not admit of being arranged under any of the preceding—viz., Lupus, Pellagra, Malum Alepporum, Syphilida, Purpura, Elephantiasis Arabica, Cheloidæ. These are, in point of fact, the principal heads of the “classification” according to which the diseases are arranged in the Manual; from which it may be seen that conciseness and simplicity are leading features in its construction; indeed, altogether it contrasts favorably with the obscure and complicated mazes, dignified with the name of “classifications,” which writers on dermatology are too prone to indulge in. Each class of diseases is preceded by some introductory remarks on the general characters, diagnosis, and mode of treatment of the various eruptions it embraces, so that at a glance the reader can make himself acquainted with their most important and distinguishing features, without being obliged to read the history of each separately. We by no means approve of that spurious method of obtaining information on scientific

subjects, now unhappily too much the fashion, by skimming the surface, and remaining satisfied with a few striking points which the memory catches and retains. But there are occasions when it is not convenient for the practitioner to sit down attentively to peruse an elaborate article, and at the same time it may be desirable to refresh his memory on a subject which he had previously studied. It is chiefly for the purpose of fulfilling this end that the short introductory chapters above mentioned were prefixed to each order of eruptions. Every disease is treated of under the following distinct headings:—*Symptoms, Causes, Diagnosis, Prognosis, Treatment*. The practitioner derives much advantage from this systematic arrangement and subdivision, as, by referring to any of these heads, he can at once find the information he requires, without the trouble of reading the chapter through, which would be necessary if this method had not been adopted.

We would call attention specially to the article on "Syphilitic Eruptions." Being aware of the high importance of the subject, and as we have never met with any other article of a similar kind, which can be at all compared to that of MM. Cazenave and Schedel in point of excellence, we strongly recommend it to the attentive perusal of our readers. This admirable essay, we have reason to believe, was dictated by M. Bielt himself, and acknowledged to be a faithful expression of his opinions and experience. This article in particular seems to have attracted, and suffered by, the attention of those good-natured moths that are ever found fluttering about the world of literature, gaining an ephemeral existence and meretricious fame by their adroitness and dexterity in appropriating to themselves the fruits of the labors of others. We could point to more than one writer who takes credit to himself for the *originality* and excellence of his remarks on syphilitic diseases of the skin, and yet the greater part of them, and especially those deserving of notice, are stolen from the work we are now reviewing.

The syphilitic eruptions are treated of under separate heads, according to the different "orders" to which they belong. For example, all those assuming an exanthematous character are described under the head of "Exanthematous Syphilitic Eruptions," and so with each of the other principal orders. The same clearness of arrangement and accuracy of description prevail here as elsewhere in the Manual, and the subject of "Syphilitic Eruptions," which has ever been considered difficult and obscure, is simplified, and rendered clear and intelligible in this really excellent article. The Manual concludes with a copious Formulary, containing the principal remedies employed by M. Bielt at the Hospital of St. Louis, which is not the least valuable part of it.

We have hitherto spoken only of the *original* work, but we have a few remarks to make on its appearance in an English dress. As a translation, the present version of M. Cazenave's work reflects credit on the literary abilities of Dr. Burgess. It is faithfully executed, and the style throughout is easy and agree-

able. Of additions, the translator has been, perhaps, rather sparing; but the matter incorporated with the original text shows that Dr. Burgess has availed himself profitably of the opportunities which he has enjoyed of studying cutaneous disease at the Hospital of St. Louis, and in this country.

We have not yet seen the work on diseases of the skin recently published by Mr. Erasmus Wilson, but of those which have fallen under our notice, Dr. Burgess's Manual is by far the most convenient and useful; the practitioner cannot follow a more safe or faithful guide, and we feel confident that it will soon attain the same degree of public favor which the original work has long and deservedly enjoyed in France.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

November 22, 1842.

A case of amputation of the leg, alleged to have been performed during Mesmeric sleep, was read, and occupied the attention of the meeting. We shall not report this case, nor the debate which ensued on its being read, regretting, as we do, extremely that the Medico-Chirurgical Society should have lent itself to a proceeding so unworthy of its dignity and reputation. Unless the council of the society be prepared to enter on a serious investigation of Mesmerism, they should never have countenanced a measure of which the advocates of that delusion will avail themselves in a manner that may readily be divined. But we shall probably return to this subject next week.

ST. BARTHOLOMEW'S HOSPITAL.

A meeting of the governors of this hospital was held on Wednesday last, upon the general business, but more immediately for the consideration of a report from the treasurer and almoners, recommending the appropriation of six houses, the property of the hospital, and situate in its immediate neighbourhood, for the formation of an establishment for the accommodation of a certain number of the pupils. The report, which was a very interesting one, detailed the advantages likely to arise from providing accommodation, more particularly for pupils coming from distant places to make their way in the world by studious application to the great school of experience in the hospital. It stated, that in many instances young men of great promise had been led into habits fatal to their education, character, and prospects in life, and destructive of their moral sense, by taking their chance in houses of which they knew nothing upon their arrival in the metropolis, remote from the protection of parents or friends, and it feelingly described the consequences of such exposure. By such an establishment as that proposed by the treasurer and almoners, it was calculated that the apprehensions naturally entertained for the morals of their sons would be, at all events, considerably abated, as the young men would be watched over by the authorities of the hospital, who would prevent by their advice and assistance to the inexperienced, a vast deal of the mischief which daily arose from the want of good counsel and the presence of temptation. Amongst other governors who supported the measure, Mr. Joshua Watson, a very sincere friend

of the institution, and one of its oldest governors, stated that he had received the notice of the intended proceedings of the day with the highest satisfaction, and had come at great personal inconvenience to support a measure which he considered would tend more to keep St. Bartholomew's Hospital in its pre-eminent station than anything he could imagine. He also declared that it was with the greatest pride he saw that great institution taking the lead in a matter of such vital importance to its interests. The report gave universal satisfaction, and as it was understood that the experiment would be in all probability tried without any draught upon the funds of the hospital, the general opinion being that the price paid for the accommodation would yield an ample rent, it was unanimously agreed to. The proposed building is to consist of a large dining-room, as well as a variety of bed-rooms. It is supposed that parents in the country will feel much satisfaction at finding such a desideratum near at hand.—*Times Newspaper*.

THE CYCLOPÆDIA OF ANATOMY AND PHYSIOLOGY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you had not vouched for the respectability of your correspondent "P.," I should have been led greatly to doubt it, from the internal evidence which his letter affords.

The mere fact of a letter, reflecting upon the conduct of others, being anonymous, will doubtless weigh with many against the respectability of the writer; but I am sure the perusal of the following extract from it cannot fail to render this feeling still more unfavorable to him:—

"With regard to the latter of these reasons—viz., the want of time, I am informed that it does not apply to Dr. Copland. A medical friend in town to whom I wrote some time ago on this subject, stated in his reply that 'the dictionary *ought* to be soon completed, for he understood that Dr. Copland had little else to do than to write.'"

So pitiful an attack, so unfounded likewise, under the disguise of public spirit, and with a feigned signature, upon a gentleman of real professional respectability, will reveal clearly to your readers the real motives which prompted your respectable (?) correspondent in writing his letter.

With respect to "P.'s" observations on the "Cyclopædia of Anatomy" I shall make a few remarks.

The irregularity in the publication of that work has arisen from a variety of causes, which your correspondent's taunts shall not induce me to divulge in the pages of a public journal.

To any person who may have subscribed to the book I should willingly explain these particulars, which, I have no doubt, would completely exonerate both the publishers and myself from the charge of fraud or disingenuousness.

The delay in the appearance of several parts of the Cyclopædia has been, as I could easily prove, *highly beneficial* to the scientific character of the book, and has been injurious to it *only in a mercantile point of view*.

I can assure your correspondent that I have no ambition to imitate the "Penny Cyclopædia," excellently

adapted as that work is to its particular object. The plan of the "Cyclopædia of Anatomy" is before the public, and to that I shall adhere.

The last paragraph of your correspondent's letter not only displays his ignorance, but shows his utter unfitness to criticise an anatomical work. The defects to which he has alluded do not exist so far as the work has gone; and I affirm, without fear of contradiction, that when it shall have been completed (which I have every reason to hope will be the case in the course of another year), there will not be any subject in human and comparative anatomy, physiology, and morbid anatomy, "for which it will be in vain to search its pages."

Your critic, like many others, imperfectly informed, confounds pathology with morbid anatomy. The Cyclopædia does not profess to treat of pathology.

I should not have taken the trouble of noticing your correspondent's criticisms were it not that I am anxious, for the sake of the highly respectable firm who have embarked a large capital in the Cyclopædia, to counteract as far as I can the prejudice which his inconsiderate (may I not say ill-natured?) remarks are calculated to excite against the book.

Believe me, Gentlemen, you do no good to medical science, nor to the medical profession, by admitting into your pages letters such as that to which I have ventured to reply. A prurient passion for attacking the reputation of others is but too conspicuous in certain correspondents of the medical journals; such attacks are not tolerated in the periodical press connected with other professions.

I have the honor to be, Gentlemen,

Your obedient servant,

R. B. TODD.

Parliament-street, Nov. 29, 1842.

*** We readily give insertion to the letter of Dr. Todd, but we cannot admit the justice of the principle which he has laid down. The subscribers to works published in parts are at the mercy of publishers, and when the conditions of publication are violated in the manner pointed out by our correspondent, it were unreasonable to deprive the sufferer of the only consolation which is left to him—that of giving expression to his complaints. We can assure Dr. Todd that we should not have given publicity to the letter of "P." had we not felt that his remarks were in the main just and justifiable. That the allusion to Dr. Copland was a specimen of extreme bad taste we freely acknowledge, but in *hebdomadal* literature the form must often be sacrificed to the substance, and if Dr. Todd possessed our experience of the weekly press he would soon discover that the productions of independent correspondents cannot be docked or fashioned like those of paid contributors.—Eds.

TREATMENT OF INSANITY IN FRANCE.

During the repeated visits which I made to Salpêtrière, many opportunities were of course afforded me of seeing the mode of treatment pursued in that establishment; but as the object proposed in these observations is not so much the medical management of insane patients, as to urge the necessity of giving every member of the profession an opportunity of acquiring practical knowledge on insanity, I will only now observe, that the principle of occupying and

amusing insane patients has recently been carried out more extensively in this hospital than at any former period; and although many of the patients are occupied in needle work, spinning, and in other manual occupations adapted to women, improvements are still going on, as the following amount of the progress recently made will sufficiently demonstrate. The statement is taken from the report of cases belonging to the division of M. Baillarger, which comprises, on an average, about 350 patients, most of whom are incurable. In 1840, the proportion of patients engaged in some kind of manual occupation, was only 23 per cent. In 1841, it was 50 per cent.; but in January last, the number of workwomen had increased to 60 per cent., and one insane patient actually gained 77 francs, in two months, by the work of her own hands. These are gratifying circumstances, and notwithstanding many instances of a similar kind might be mentioned, one will suffice. It was that of a poor infirm woman, an incurable idiot, who was often so dangerous that formerly it became necessary to watch her constantly, lest she might commit suicide, to which there existed a strong propensity. This unfortunate creature having been taught to spin, she has become so tranquil, and apparently so attached to her mechanical employment, that she now sits in the ward quietly spinning at her wheel, although only very loosely tied to the back of the chair, to keep her from falling, both her hands being perfectly free. The improvement is quite apparent; nay, when I saw her, she even showed some dawnings of returning intelligence.

Formerly the patients were left much to themselves; but now every means are taken to occupy and amuse them. In one chamber, from 120 to 130 incurable lunatics often assemble together to dine at the same table, when knives and crockeryware are used without any evil consequences. In another apartment, from 40 to 50 frequently meet to play at dominos, back-gammon, or to work, converse, or learn music from notes, chalked upon a large black board placed in the room. Again, three times a-week, after the visit of the physicians, those patients who are able or whom it is thought advisable to give permission to attend, meet at what is called the *réunion*, under the direction of a music mistress, who presides at the piano. On these occasions, some sing, others recite, and the rest sew or knit at the tables round the room; and frequently from 70 to 80 in each division will thus pass an hour very pleasantly, and behave quite as well as some more sane and fashionable audiences occasionally do.

M. Falret, one of the physicians, being a great advocate for the cultivation of music as a subsidiary means in the treatment of insanity, zealously promotes the regular *réunions* held in his division. I attended several of them, and was always much gratified with the performances. The room was generally quite full, and many patients looked in at the windows, or listened at the doors. At one of these musical *réunions*, 80 insane patients were present, besides spectators, some of the latter being ladies. M. Falret occupied the centre of an elevated table, having before him the programme of the exercises for the day, with the necessary books. The abbé, who superintends the religious instruction of the patients, sat on one side,

with the schoolmaster and mistress on the other; whilst one of the house pupils presided at the harpsichord, and a patient led the singing. The performance began with a solo, then duets were sung by different patients, and others recited fables or amusing stories; afterwards the schoolmaster declaimed an heroic poem, which was followed by three patients reciting the third scene of the third act of Molière's "*Bourgeois Gentilhomme*." This they did very correctly from memory, and to the great amusement of the audience. Another song was now sung, a dialogue by two of the patients was then recited, and the day's amusement concluded with a canticle, in which nearly every one present appeared to join, when all quietly retired, apparently well pleased with their morning's recreation. As a proof that music is considered very beneficial, not only are these *réunions* encouraged, but a music master comes regularly three times a week, to give lessons in singing to the patients; indeed, every means are now employed to engage the minds of the afflicted inmates of the Salpêtrière in some agreeable or useful occupation, and to gain their confidence by gentleness and kind treatment. This is constantly kept in view; for it is well known that the insane are generally grateful when well treated,—will often become attached to those showing them kindness, and frequently testify their gratitude by endeavouring to check any propensity they may feel to behave absurdly, or commit extravagances. I might easily dilate at considerable length upon the musical *réunions* held at the Salpêtrière, but it will suffice to observe, that these meetings not only appeared to give much satisfaction to the patients, but also to act efficaciously in their treatment. In many, the effect produced by the music upon their countenances and behaviour was often quite apparent; and I could cite several instances of its beneficial influence, but one will be sufficient, which I met with in a young female who had been admitted the previous evening. At the first visit of the physician, only an hour before, this poor girl was morose, stupidified, and could scarcely answer questions distinctly; but now she seemed pleased with the entertainment, talked to her neighbour, and looked up cheerfully to the physician; indeed, she appeared altogether a changed creature, and no one from her appearance or conduct would have said she was either insane, or the inmate of a madhouse.

During four years, ending the 1st January, 1842, 2,830 lunatics, exhibiting every form of mental disease, were admitted into the Salpêtrière, of whom 1,212 were afterwards discharged cured, 604 relieved, or left the hospital from other causes, and there were 924 deaths. This very great mortality certainly appears remarkable, and may excite astonishment; but as every variety of mania is received, including epileptic, paralytic, and many incurable patients, so large a proportion of deaths may be, nevertheless, explained; for it would be unjust to compare the results obtained in such an establishment as the Salpêtrière with any asylum, where only recent and selected cases are received. Still, with such disadvantages, the number of patients discharged cured, during the last four years, amounted to 40 per cent. on the total admissions.—*From the Third Edition of Dr. Webster's Pamphlet;*

RETROSPECT OF THE MEDICAL SCIENCES.

DEFORMITY FROM BURNS.

Dr. Mütter, the professor of surgery in Jefferson Medical College, Philadelphia, has detailed the particulars of three cases of exceeding deformity from burns, in which he performed an operation as novel in its application to this species of deformity as it was successful in its results. The first case is that of a young lady, Miss A. T., who, at the age of five years, was severely burnt by her clothes catching fire. No medical treatment was resorted to, from mistaken kindness on the part of the friends, and the result was an exceeding degree of deformity. The lady, in describing her condition, says, "I have been unable to throw my head to my left side, or backwards, or to close my mouth for more than a few seconds at a time for twenty-three years. My right eye was also drawn down some distance below the other, and when I endeavoured to turn my head it was entirely closed." Dr. Mütter, on examination, found in addition, the angles of the lower jaw altered and the incisor teeth nearly horizontal (as is seen in cases of chronic hypertrophy of the tongue) by the pressure of the tongue, which organ, in consequence of the inability of the patient to close the mouth, was always visible, and, indeed, protruded, when she was silent. The clavicle of the right side was so completely imbedded in the cicatrix, that it could scarcely be felt, and there was not any external indication of its location. The chin, from the shortness of the band, was drawn down to within one inch and a half of the top of the sternum, and the head consequently inclined very much. The space between the chin and sternum was filled up by the cicatrix, so that no depression existed in front of her neck. The ordinary operations in such a case not offering any chance of success, Dr. Mütter decided on practising a novel application of the process of *Talicotius*, which he accordingly executed on the 12th of January, 1841, assisted by Drs. Noble and Pierce. The steps of the operation were as follows: the patient being placed in a strong light, and seated on a low chair, her head was thrown back as far as possible, and sustained in this position by an assistant. The operator then, seating himself in front, began by making an incision which commenced on the outside of the cicatrix in the sound skin, and passed across the throat into sound skin on the opposite side; this penetrated merely through the integuments, and was made as near the centre of the cicatrix as possible. It was, therefore, about three quarters of an inch above the top of the sternum, and of course in the most vital part of the neck. The object in making it so low was to get at the attachments of the sterno-cleido-mastoid muscles, which, in consequence of the long flexion of the head, were not more than three inches in length, and required on one side complete, and on the other partial, division before the head could be raised. The integuments having been thus divided, the cicatrix was next carefully dissected through, until the fascia superficialis colli was reached, and then the right sterno-cleido-mastoid was exposed, and both its attachments divided on the director. The head could then be raised an inch or two, and when the sternal attachment of the left

sterno-cleido-mastoid was divided, the head could at once be placed in its proper position, the clavicular attachment of the muscle offering little or no resistance. A wound, six inches in length by five and a half in width, was thus made, and yet there was scarcely any hæmorrhage, only three or four vessels requiring ligature. To fill up this immense chasm, an oval flap, six inches and a half in length by six in width, was dissected from the left shoulder, its attachment to the upper part of the neck being left intact. This dissection was painful, but not bloody, only one small vessel being opened. The flap, thus detached, was next brought round by making a half turn on its pedicle, placed in the gap it was destined to fill, and carefully attached by several twisted sutures to the edges of the wound. It was also supported by strips of plaster. The edges of the wound on the shoulder from which the flap had been removed, were next brought together by straps and sutures, and with the exception of its upper third, carefully covered in. A pledget of lint moistened with warm water was next laid upon this raw surface, a bandage applied by which the head was carried backwards and maintained in this position, and the patient put to bed. This very severe operation was borne with the greatest fortitude.

Very little disturbance followed; no unfavorable symptom made its appearance, and union by the first intention took place throughout the entire wound, with the exception of one small point which united by granulation. The wound in the shoulder, except just over the acromion process, also healed kindly, and the patient has been relieved of nearly all inconvenience. The angles of the lower jaw have, in consequence of the change in the condition of the throat, regained in a great measure their proper shape, and the lower incisor teeth have been straightened, and one of them extracted by a dentist.

To support the neck after the incision had healed, the patient wore a stiff stock for a while by Dr. Mütter's directions, and this instrument served to press the integuments back, by which the natural excavation or depth of the neck in front was readily effected. The motions of the head are perfect.

The second case is that of a girl, aged twelve years, suffering from a more severe deformity, likewise the result of a burn in early infancy. For nearly eight years she had been unable to turn her head to the left side, the lower lip was everted, and the chin drawn down nearly in contact with the sternum, while the front of the throat presented a rough, reddish cicatrix. The operation was nearly identical with that of the preceding case, only that the section of the right sterno-cleido-mastoideus was in this instance sufficient to allow the head to assume its natural position. A permanent cure was effected without the occurrence of any unfavorable symptom.

The third case was seen in January, 1842. A boy, nine years old, named Charles M'Alister, had a deformity from a burn of several years' duration. In this case the mouth was kept permanently open, the incisor teeth were losing their perpendicular position, the chin was drawn to within an inch or two of the

sternum, and a strong band of the tissue of the cicatrix passed along the centre of the throat, from the chin to the sternum. The motions of the head were, of course, very much impeded. A similar operation was performed for the relief of this boy, with the exception that neither of the sterno-cleido-mastoidei required division. Three weeks after the operation, he was brought into the amphitheatre of the hospital with scarcely a vestige of the deformity remaining, and the wound healed throughout, with the exception of a small portion of the shoulder from which the flap had been removed, and which united by granulation. Previous to Dr. Mütter's operating on this lad, a professional friend had attempted to relieve him by making incisions in the sound skin, dissecting up the cicatrix, and separating the edges of the wound in the sound part, so as to allow it to fill up by granulation. As will readily be perceived by the necessity that existed for the operation previously described, this proceeding almost entirely failed.

A fourth case of this deformity has been treated by the talented professor of surgery, and with equal success, but the details are not given, as it resembles the others in almost every respect. Dr. Mütter's paper is illustrated by explanatory woodcuts.—*Amer. Journ. Med. Sci.*, July, 1842.

PHLEBITIS OF THE LIVER.

The following cases of inflammation of the veins of the liver, observed by M. Lambrun at the same time at La Pitié, and recorded by him in the "*Archives Générales de Médecine*," are worthy of notice, on account of the obscurity with which the diseases of that viscus are in general enveloped, and of the exceeding difficulty with which a differential diagnosis of its diseases is established. Hitherto inflammation of the hepatic veins has been recognised only after death, when an examination of the body has been made, a fact that would appear somewhat astounding, when we consider that inflammation affecting the venous system elsewhere is readily recognised, and can only be attributed to the obscurity which has been just alluded to, by which the diagnosis of its various diseases is rendered difficult.

The first case published by M. Lambrun is one of phlebitis of the vena porta, occasioned by the presence of a fish bone, which had, in all probability, made its way through the membranes of the stomach, and fixed itself into, and beyond the trunk of the superior mesenteric vein. The patient, a man sixty-nine years of age, of a strong constitution, was admitted into la Pitié on the 4th of June, 1841, having apparently previously only labored under symptoms of disorder of the digestive apparatus. He was then seized with irregular rigors, nausea, and desire to vomit, and insomnia. The pulse was natural, the liver not enlarged, nor sensible to pressure. The pain he experienced was felt by exacerbations, and also as a continuous pain; in the course of the following days he became jaundiced, the pulse increased in frequency, and fever set in, in irregular accessions. Towards the termination of the complaint prostration came on, and the patient died on the night of the 29th of the same month. In order to stop the febrile accessions, the sulphate of quinine had been frequently administered to him, but uselessly.

On examination of the body, the ducts of the gall-

bladder were found to be healthy, but the vena porta contained a large quantity of matter resembling lees of wine. On examining the mesenteric divisions of this vein, a fish bone was met with in one of the trunks, which was implanted in the head of the pancreas, and passed completely through the vein. It was about thirteen lines long, and as thick as a strong pin. The vein was obliterated where the bone was found by greyish and very adherent pseudo-membranes; its ramifications above that point were healthy, but full of coagulated blood. There cannot be any doubt that this bone made its way from the stomach, for a brownish spot was found on its external coat, corresponding to one of the extremities of the bone, and internally there was a slight depression at the same spot, and the narrow orifice of a small cul de sac. The hepatic divisions of the vena porta were all more or less diseased, and filled with pseudo-membranes and sanious matter; the liver had undergone certain changes, but only in those parts where the diseased state of the veins was the greatest. The other organs were healthy, with the exception of the lungs, which were the seat of an hypostatic engorgement.

The second case was that of a carter, forty-eight years old, who was admitted on the 18th of April, 1841. He was about the middle height, had the icteric tint of skin, and appeared to be imbecile. The cause of his complaint, which had continued already eight days when he was admitted, was an attack by thieves, who had stolen his money, and beaten him severely. Since that period he had been suffering, and laboring under fever; he had also been affected with vomiting, and alternately diarrhoea and constipation. The epigastrium was scarcely painful on pressure. On the 29th he was seized with an accession of fever, which occurred on each succeeding day, and was advantageously treated with the sulphate of quinine, but without at all improving the health otherwise. On the 7th of May the fever returned, and was again treated as before; the want of sleep became permanent. The patient gradually became emaciated and more yellow, the diarrhoea was continual, the fever relapsed, prostration was extreme, and he died on the 5th of June.

On examination of the body, an ulcerated cancer, about the size of a two-franc piece, was found near the pyloric extremity of the stomach; the liver was of a straw yellow color, of natural size, and contained here and there seven or eight purulent collections, the centre of which presented a greyish matter, the circumference a matter of the color of lees of wine. One of these abscesses was situated near one of the hepatic veins, which was perforated and ulcerated, and full of false membranes on either side of the ulceration. There was coagulated blood in all the divisions of this vein, in consequence of the circulation having been arrested in it. It was easy to follow all its subdivisions, even the finest, on the surface of the liver, where they formed a red point, which contrasted with the yellow color of the organ.

M. Lambrun thinks that the physician may diagnose phlebitis of the liver when, after some days of general disorder and epigastric derangement, more or less perfect accessions of fever show themselves, at first intermittent, then remittent, and finally almost con-

tinuous, and not curable by the sulphate of quinine, especially if, at the same time, there exists a local pain and emaciation, and a typhoid state follow the feverish accessions. This variety of fever, however, is not peculiar to phlebitis, and the symptoms of disorder of the digestive functions may depend upon other causes.

MALIGNANT DISEASES OF THE SKIN, AND SUBCUTANEOUS SUBSTANCE OF THE HEAD AND FACE.

Dr. Byron, physician to the County of Meath Infirmary, in a communication published under the above title, in continuation of an essay, an abstract of which was given in a previous Retrospect, gives a detail of his experience in the use of the chlorate of zinc as an escharotic. His paper refers chiefly to the treatment of lupus exedens, affecting the nose, eyelids, and cheek. Three cases are published, in which the disease affected the cheek and eyelids, to which the chlorate was applied; in the first case, that of a man, forty years of age, the lupus commenced about six years previously, and at the time of his admission, there was a superficial ulcer not apparently deeper than the cutis vera, occupying upwards of two-thirds of the right under eyelid, extending from near the outer commissure along the tarsal border, which, with the cilia, was removed to the extent mentioned, leaving the globe of the eye and its conjunctiva exposed; the latter was thickened and drawn inwards, and the inferior margin of the ulcer was irregular, not materially thickened nor everted, but excavated, presenting much the appearance of herpes rodens. and its surface pencilled over with a thin pale gelatinous matter, which, though soft, was not easily removed. There was a painful sense of heat and itchiness in the ulcer, which, however, seldom amounted to absolute pain, but he suffered at times from pain in the head of a lancinating nature. His general appearance was indicative of disorder, and his spirits were depressed, but there were not any appreciable indications of physical disease, or functional disturbance.

The entire surface of the sore was touched with the solid chlorate of zinc, by which the sensations of heat, pain, &c., were in a great degree removed. The pain of the application was excessive, and the heat and redness caused by it continued for two days. When the inflammatory symptoms had subsided, the application was renewed, but only to the margins and foul parts of the ulcer, by which it was much cleaned, and healthy florid granulations induced. The chlorate was applied afterwards every third day to those parts only which presented a foul or unhealthy appearance, and never until the heat and redness consequent upon the preceding application had gone off, and at the end of a month cicatrisation was completed. The chlorate of zinc was used ten times. The patient died soon afterwards of pulmonary disease.

In the second case, which was similar to the preceding, the application of the chlorate of zinc speedily changed the aspect of the ulcer, and lessened its peculiar painful heat and itchiness. In three weeks its surface was clean and granulating healthily, and in six weeks it was almost cicatrised, when the patient departed for America. Dr. Byron heard afterwards from his friend, that he was perfectly well. The third case was a very interesting one, in which the complaint was of much longer standing, and the

malar bone diseased. The patient's general symptoms were more severe. The chlorate of zinc in this instance also apparently effected a cure, but after the lapse of thirteen months, while convalescing from fever, and while exceedingly weak, the lupus returned, affecting the same spot, but presenting a modification of the previous symptoms. The man was still under treatment at the time of the report, and Dr. Byron promises to publish the result.

With respect to this variety of lupus, Dr. Byron says that, in all the cases (eight in number) which have fallen under his observation, the affection was from the commencement attended with a constant peculiar sensation, as if the parts were consuming under its influence. And although this early symptom was not sufficient materially to embitter life, it was always of such a nature as to produce feelings of discomfort; and in every instance, when the ulceration had acquired the magnitude of a shilling in circumference, pains, more or less intense, were periodically present; and about this period the mucous surfaces of the stomach or bronchus, or both, were sympathetically affected. It is also worthy of remark, that in every such case, where the constitutional disturbance already referred to occurred, the subject of it had acquired an age ranging from thirty to sixty years.

The rapidity with which the aspect of these ulcerations was improved under the use of the chlorate of zinc is, Dr. Byron considers, at once a proof of the efficacy of the remedy, and also the local character of the affection up to a certain period. What that period is, when all known remedies prove useless, remains to be ascertained. He uses the chlorate in the solid form, although it has hitherto been advised to be applied either in solution or in the form of a paste made with lime, flour, or some such substance, because—1st, it is at once, and in the full enjoyment of its escharotic powers, brought in immediate contact with the diseased surface; 2nd, its reapplication is regulated by existing circumstances; and 3rd, no parts are subjected to its use but those which seem to require it.

Some precaution is necessary in the application of this powerful escharotic to the skin of the head and face in young subjects; for them it should be diluted by the admixture of from three to ten parts of water, and the pain, redness, &c., consequent on one application, should always be allowed to subside before it is reapplied, else a slough of the part will probably follow. The same precaution is not necessary to the same extent with persons advanced in life.

Dr. Byron proceeds afterwards to detail cases of lupus, affecting the nose and cheek, the disease being varied by constitutional causes, such as scrofula, syphilis, herpes, chlorosis, anæmia, &c. He states that, having tried a great variety of local remedies, he is of opinion that few deserve any attention; the most valuable is the simple and medicated douche, next to which he ranks the chlorate of zinc, and Donovan's liquor hydriodatis arsenici et hydrargyri, which he has found most useful in that form of lupus commencing on the inside of the nose. Ointments of every kind are inadmissible.

The following are the inferences drawn from the cases detailed in Dr. Byron's communication:—

1st. Malignant ulcer of the eyelid is, in its earlier

stages, up to a period not yet defined, local, and admits of cure by local treatment only. 2nd. It is usually a disease of advanced life, but is not confined to any temperament or condition of life. 3rd. This malady is rarely found combined or coexistent with other affections; on the contrary, its presence seems to exempt from any such liability. The sympathetic affection of the stomach, bowels, and bronchi, already referred to, forms an exception to this rule. 4th. Lupus, on the contrary, seems in most instances to have a constitutional origin, being, as already shown, found to follow from, or coexist with, other affections or disordered conditions of the system; moreover, it is most effectually checked by constitutional, combined with local, treatment. 5th. The difference, though well marked in several instances, between these two affections is infinitely less apparent than between either of them and cancer. 6th. The term "malignant" may be fairly questioned, as being applicable to the earlier stages of ulcers of the eyelids; but it is absurd and inappropriate in the great majority, at least, of cases of lupus.—*Dublin Journ. Med. Sci.*, Sept., 1842.

EFFECTS OF REMEDIES ON THE GENITAL ORGANS.

In some recent Numbers we published a few cases, tending to show that the local use of tartar-emetie or croton oil as counter-irritants may produce a curious effect on the genital organs. Dr. Boas has observed an analogous effect produced by assafœtida plaster, which he is much in the habit of employing. In men, tumefaction of the scrotum often occurred; in women, tumefaction and even inflammation of the external labia. In one case, that of a woman fifty years of age, where the plaster had been applied on the abdomen, very troublesome inflammation of the external organs of generation, requiring an antiphlogistic treatment, supervened, and the mammae became greatly enlarged, and furnished a milky secretion in considerable quantity.—*Casper's Wochen.*, No. 51, 1841.

COURT OF QUEEN'S BENCH.

Nov. 28, 1842.

VEITCH v. RUSSELL.

Some time back we noticed this case, which terminated in the defeat of Dr. Veitch. The present motion was one for a new trial, on the ground that the jury had returned a verdict entirely contrary to evidence; but the court decided that there was no ground whatever for disturbing the original verdict. The only point interesting to the profession in the case is the formal declaration of the court, that a physician might enter on and enforce a *special* contract for the payment of his fees.

MEDAL OF THE ROYAL SOCIETY.

We feel pleasure in announcing that the gold medal of the Royal Society has been awarded to Mr. Bowman, of King's College.

THE GRAVEYARD QUESTION.

Mr. Chadwick, secretary to the poor-law commissioners, has been appointed by Sir James Graham to conduct an inquiry on the burial of the dead in cities.

THE ECHOMETER.

Dr. Aldis must have a queer notion of things if he thinks that any estimate could be formed of his instrument by our printer's looking at it for a few minutes.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, November 25, 1842.

F. H. Woodforde, J. Dowling, W. Roden, H. Aylward, S. S. Smith, J. J. Gray, C. J. Newstead, A. Collinson, J. Mahony.

APOTHECARIES' HALL.

Licentiates admitted Thursday, November 24, 1842.

R. G. Coombe, Newcastle, Staffordshire; R. Palmer, Letecomb Regis, Berkshire.

BOOKS RECEIVED.

On Gravel, Calculus, and Gout, chiefly an Application of Professor Liebig's Physiology to the Prevention and Cure of those Diseases. By H. Bence Jones. London: Taylor and Walton, 1842. 8vo. pp. 142.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

Ludlow.—The conduct of the committee appears to be unjust in the extreme; but we cannot venture to condemn it, or comment thereon upon an *ex parte* statement.

R. H. J.—The apparatus alluded to by Dr. Watson in his last lecture may be procured from *J. Ronquette*, 116, Great Russell-street, Bloomsbury, London.

The communications of *Mr. Slater* and *Mr. Worthington* in our next.

W. R.—It was impossible to comply with the request of *W. R.* The omission would have been useless, as the publication takes place in other journals.

A Reader.—Indentures are not required by the College. The circumstance alluded to would have no effect at the Hall.

In reply to numerous letters respecting the regulations of the College of Surgeons, we refer our readers to an official advertisement on the wrapper.

The letter of *Mr. Estlin* on the prussic acid delusion shall appear next week. As a general rule, we are unwilling to notice any of the proceedings of quacks, whether professional or non-professional; but in this instance we shall yield to the wish of our respected correspondent.

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COURSE OF CLINICAL LECTURES, DELIVERED AT THE MIDDLESEX HOSPITAL. BY DR. WATSON.

Lecture VII.—November 26, 1842.

GENTLEMEN,—One case of death has occurred since our last assembling here, to which I shall in the first instance direct our attention. The name of the patient was Thomas Varney, a man aged thirty years, or thereabout, and who was admitted on the 30th of August, suffering from dysentery of long standing. The complaints made by persons so affected are uniformly the same, though varying in the degrees of their intensity; and those complaints are, of pain in the abdomen, of tenderness in the epigastrium, of flatus, and of purging, and tenesmus alternately—such were the ailments of this patient. His stools, also, were slimy and contained blood, and they were peculiarly offensive; there was also much pain along the course of the colon. His disease, and the sufferings I have alluded to, were so obstinate under all treatment that could be devised, that I concluded there was chronic organic disease of the bowel, and especially of the rectum and colon. From all the symptoms presented, I considered it and named it chronic dysentery. He had been, he said, ill and thus affected for three months previous to his entering the hospital. His aspect was tolerably good, not appearing worn or emaciated, and he had not much fever. The remedies which we tried were opiates, alternated with aperients, sulphate of copper, mercury, the vegetable astringents, catechu, logwood, and ratanhia. No lasting effect was produced by any of these. On Wednesday last his face, which had hitherto evinced little traces of great suffering, became paler and more anxious. He still made the same complaint of pain and flatus in the abdomen; but his symptoms were evidently becoming worse. Mr. Corfe, on examining him, found his belly very tympanitic, and so extremely tender that he could not endure it to be even gently touched. Henceforth he rapidly sank; he became distressed by hiccup; his pulse became very feeble; and in this weak condition he died.

Here we have a case of what is very common, and what we meet with in hospital and general practice—that is, life terminated by acute inflammation grafted on chronic disease. The consequences of the acute inflammation were in this case very well marked. On post-mortem examination you perceive pus and flakes of lymph on the serous membrane of the bowel, and the coils of the intestines are glued together. From the history of the case I was led to expect that examination should develop to us ulceration and perforation of the bowel as a cause of the peritonitis.

My expectations were fully realised—we found, in fact, scirrhous of the rectum, of which the parts, as now laid before you on the table, present a good specimen. You perceive a discolored and ulcerated patch, as large as a halfpenny, on the outside of the ileum. The mucous membrane was not the tissue primarily diseased, but probably the submucous, or the muscular tissue. You observe that the superficial appearance of the liver and spleen is dark colored; the lungs and the other viscera present a healthy aspect; but these are insidious symptoms.

We shall now turn to the new patients, and of those eighteen have been admitted during the past week—ten men and eight women. We may classify them thus:—

There are three cases of decided acute rheumatism—those of Louisa Skinner, Ann Kellow, and George Wells. Two of complaints kindred to acute rheumatism—one being lumbago, in the person of the patient George Garratt; the other rheumatic pains, in the person of Thomas Escott. Of the three decided cases, Louisa Skinner's is one in which I have not yet fully satisfied myself whether the heart is engaged; but she has had palpitation. The other two cases, those of Ann Kellow and George Wells, are cases of cardiac complication. As the number of persons lately admitted affected with rheumatic disorder is unusually great, it may be well to touch rapidly on their cases before proceeding to the consideration of any others.

One of the patients named, Ann Kellow, had been in this hospital before. That was about two years ago, when for the first time she was attacked by acute rheumatism, she being then twenty-two years old. In that attack she had palpitation of the heart, to which she had not been subject before, and under which she has suffered from time to time ever since. Here I may observe, that the younger the patient visited by acute rheumatism the greater is the probability and danger of cardiac complication; and the history of this young woman's malady is a very common history as regards persons of her age. The fact of her having had this palpitation consequent on the former attack was quite sufficient to arouse our suspicions that the heart was now involved, and our fears were confirmed by auscultation; for we detected a bellows sound with the systole, heard over a large space, but most audible along the course of the aorta, particularly at the apex, where it inclines to the right side of the left ventricle, showing that the aortic valves are implicated.

George Wells is also a youthful patient—indeed, very youthful—his age is only fourteen. He also had a first attack of acute rheumatism two years ago, at the early age of twelve, but had then no chest affection that he remembers or was aware of. Upon his own opinion on this point, however, we must not per-

haps implicitly rely. He now labors under the same disease; the symptoms are the familiar ones, and I need not specify them. He is now much better, having experienced great relief since his admission. The present attack commenced two months ago, when he was seized by articular rheumatism, first in the ancles, then in the knees, and subsequently the chest became implicated. He has had pain in the pericardiac region, with palpitation and short breath, and he can lie on his back only. I have before, and I believe more than once, directed your attention to the fact, the melancholy result of experience, that acute rheumatism very commonly, if not in the majority of cases, superinduces cardiac disease. And here our observations are corroborated; for out of three rheumatic patients, admitted during the week that has just past, two present instances of unequivocal cardiac affection. Speaking of this boy, I should notice to you a statement of his not devoid of interest; he says that he had formerly been subject to sweating of his feet, and that the sweating ceased on the supervention of the rheumatic disorder. Of such a phenomenon we may not perhaps be yet able to give a certain explanation, but I may state to you what I consider a reasonable and probable explanation. I am of opinion that rheumatic disease proceeds from a species of poison in the blood—that the *materia morbi* is something of a poisonous or morbid character present in the circulation of the blood—and that in the efforts of nature to eject this matter, and protect the system, the morbid acid is sometimes evacuated with the urinary discharges, sometimes expelled by the instrumentality of the bowels, and sometimes by means of cutaneous evacuation, by sweating—and that the evacuation or expulsion of this matter, whatever may be the peculiar channel or mode of its removal from the system, being by some cause checked, the morbid matter or acid then exerts, without hindrance, its poisonous influences. I repeat, this is only a hypothesis, but it appears to me a reasonable one.

As a *pendant* to those cases already enumerated, we have that of William Frech, aged thirty-two, who has slight anasarca, and swollen extremities, pitting on pressure. Anasarca is sometimes the accompaniment of disease of the heart, sometimes of disease of the kidneys. The symptoms indicating disease of the heart are palpitation and systolic bruit. In this man's case there is slight systolic bruit, and we find that he had several attacks of acute rheumatism, the first having seized him two years ago, after getting a severe wetting. In the cases to which first I directed your attention, the affection of the joints led us to inquire into the condition of the heart, and we find it diseased. In the second instance, the evidence of cardiac disease existing induces us to go back, and institute an inquiry as to previous rheumatic fever, and we find that he had had several attacks of that disorder, and that the palpitation came on since the first of those attacks.

Of cases analogous to those, the first is that of George Garratt, who is affected with lumbago. He has had severe pains in his joints and in his neck during eight weeks, without any cause that he can assign. Lumbago, being a sort of rheumatic affection of the tendinous fibres of the lumbar muscles, generally yields to cupping, or to counter-irritation—cupping

over the loins, in particular, affording relief. In his case both have been most decidedly tried, and have failed; he has been cupped nine times, he has also been leeches copiously, and blistered—all in vain. His pains are somewhat relieved by rest, just as they are increased by movement. When last I saw him he said he was quite easy; I had directed a turpentine stupe, after which he was lying quite easy, the relief arising, no doubt, from the absence of exertion, from not putting the affected muscles on the stretch. There is no affection of the kidneys—at least, none manifested by the urine. He complains of cold, and consequently increased pain at night, and he feels better when he is warm. Guaicum was administered, and had the effect of causing a burning sensation in his limbs.

Of the eighteen new admissions, I have now mentioned six, and those, you observe, are all more or less of rheumatic character—presenting the large proportion of one-third of all the new cases.

We shall now glance at the other twelve. There is one case of colica pictorum, or painters' colic, in the person of John Mullins. On this complaint, the consequence of the accumulation of the poison of lead in the system, I have on a former occasion spoken at some length. Mullins has pain in the abdomen, which is relieved by pressure, as with the hand; his pulse is slow, only reaching 52, probably he has been depressed by suffering. He is by trade a painter, and has been so four years, and in his avocation was exposed for that period to the imbibing of the poison of lead, and to its gradual accumulation. A week before this last admission he had come in with a similar attack, and was then a patient of Dr. Hawkins. He was on that occasion relieved by freely emptying the bowels, and left the hospital much better. He had not resumed his work during the interval, therefore it is clear that the former poison had not been completely expelled. He returned with much pain in his legs, but there was no affection of the arms. On the case to which I have alluded as having been the subject of observation in a former lecture, I had at first some doubts as to its true character; but in this there is no room for doubt, the distinctive blue line marks the lower edges of his gums, showing the presence of the sulphuret of lead. He has been much relieved, and has had lumpy evacuations, induced by enemata while in the warm bath. This effective mode of relief, recommended and practised by my colleague, Dr. Wilson, I have successfully tried with him—that is, placing the patient in a warm bath, and injecting a portion of the same water while he remains in the bath.

There is one case of uterine disease, Sarah Chambers; one of obstinate headache, Sarah Wilks; and on this subject I shall have some observations to make on another day; one of anæmia, Elizabeth Round; one case, that of John Taplin, some obscure thoracic affection—when I say obscure, I only mean that it is obscure at first investigation, and that I have not yet satisfied myself of its nature; one, that of Henry Field, a well-marked case of chorea, or that very curious disease known by the familiar name of St. Vitus's dance; one of partial paralysis, James Kerseymere, one leg only being affected; one, John Windsor, of severe continued fever.

There is one case, that of Hester Green, which is peculiarly worth your watching. She suffers violent pain in her throat, and pain in the epigastrium and the right hypochondrium, which affects her at intervals; she has also nausea and vomiting, but no febrile symptoms. It is a case of gastrodynia, perhaps depending on gall stones, operating so as to cause rejection of food at times, but not obstructing the passages altogether. Dr. Heberden is of opinion that no patient has suffered from this malady who has not been jaundiced. No jaundice has made its appearance in this woman as yet. I shall relate to you a case, which did not occur in hospital, but in the course of my private practice, and which may afford some ground for contemplation and comparison. An elderly, indeed a rather old lady, had an attack of jaundice, accompanied by considerable pain. The attack yielded to treatment, the pain and jaundice passed away—the pain, however, recurring now and then. Five years after that she was seized with obstinate constipation, which resisted and overcame every attempt made for its removal. She retained no portion of the food which should have passed by the ordinary canal, for the faecal contents of her bowels were ejected from the mouth, or, as she expressed, the contents were coming the wrong way. One day Dr. Arnott having accompanied me to visit her, and consult with me, he examined her abdomen, as well as myself, but probably, as it appeared subsequently, he used greater pressure of his hand while examining than I had done. We had retired to another room for consultation, and before we left the house a servant ran in to inform us that the lady's bowels had acted. We were somewhat surprised at the suddenness of the change, and of course we examined the matter evacuated. We found it was precisely the same sort of stuff which she had been in the habit of rejecting by vomiting. Next day I also examined the evacuations, and found the calculus I now show you. It is rather a large one, and was, no doubt, the cause of the obstruction, having fallen across the valve of the colon, and so caused the faecal vomiting. This calculus had probably been displaced by the pressure used by Dr. Arnott, and had then easily been rejected by the ordinary passage. As regards Hester Green, I do not know as yet whether her case be similar, or whether it be dyspepsia. It is, however, one very well worthy of your anxious notice.

The next case is that of Jane Stoker; she will soon be well, and, therefore, I may as well now say the little that I have to observe on her. It is a case of cutaneous disease, known as erythema nodosum, which produces purple blotches and eminences, the causes of which it is difficult to account for. It is rather peculiar to her case that these blotches affect the calves as well as the front of the legs; sometimes, but very rarely, the arms are similarly affected. In nine cases out of ten we find this ailment attacking women; the reason of this is, at least as yet, unexplained. The redness, or purple colour, in those nodes fades away, especially towards the edges, and if you never saw a case of the kind before, you might be led to infer that an abscess had formed beneath. I have said that our patient is much better, and her relief she ascribes (reasoning in a mode usual to persons in her sphere, and indeed not unusual in persons even of superior

education and position, *post hoc propter hoc*) to the use of the warm bath. But I attribute her relief to rest, to her having remained in a horizontal position and in quiet, and also to the use of the sulphate of quinine, which I have found a sure remedy. Some time ago a servant of my own became similarly affected, and required to be treated antiphlogistically; she had a quick pulse, and the purple prominences. I administered quinine, and the ailment quickly disappeared; since which time I have had the greatest confidence in this medicine, and have in numerous instances used it with success; I can, therefore, recommend it to you for use in similar cases most confidently.

Mary Hinds is affected by severe nervous pains of the knee; it is an important point in the diagnosis that the patient is hysterical, and on this account the pain is called hysterical. The suddenness of the painful attacks, and of the alternations from health to illness, is a mark of the hysterical character of the malady. She tells us that at times she cannot, from the excessive pain in her knee, put her foot to the ground for a whole week together, when suddenly, next day, she finds the pain gone, and that she is able to walk as well as anybody. Similar phenomena sometimes attend dysphagia. I remember a case mentioned by Dr. Bright, which is a remarkable one of dysphagia, where, previous to the attempt to introduce the instrument into the oesophagus, there was no symptom of hysteria, but on the passage of the instrument, violent hysteria occurred, and the patient was subsequently hysterical. Aphonia and amaurosis show like freaks. In this instance Mr. Arnott examined the knee, and there was found no organic disease. She says that she sometimes shakes, but she has no regular fits. The catamenia are scanty, and have been attended with pain, besides occurring too late—that is, being postponed beyond the regular period. Her spirits are variable, her bowels slow to act, and she does not much like meat for food. The warm bath has cured her before. Her knee at present has a bright patch, with an irregular well-defined edge.

One patient more will make up the eighteen. Robert McIntosh labors under pleurisy with effusion. The phenomena attending such cases vary; he has had the ordinary symptoms, and presents in a well marked degree the physical signs of the disease. He has pain about the right nipple, extending to the hypochondriac region and to the shoulder, and indicating extensive inflammation of the pleura. On my first examination I found tubular breathing at the lower extremity of the right lung; at my next visit I found, instead of the lower extremity being dull, universal dullness and bronchial breathing and broncophony. These are striking symptoms, and show that the lung has been long compressed and useless. On the other side there was loud respiration—what is termed puerile respiration, because such breathing is proper to children. Notwithstanding that the effusion of serous liquid abolishes the office of the lung, it is seldom dangerous to life, if it be not complicated; for generally the fluid is taken up again where there are no tubercles in the lung. To remove the serum, recourse is frequently had to tapping, and sometimes it is necessary; but I would advise you, unless you find it absolutely necessary, to abstain from it as a hazardous operation. I know that my opinion is not concurrent

with that of all medical practitioners, and that some for whose judgment I have the highest respect recommend the practice; but there are also many others, whose judgment is equally to be respected, who coincide with me. Two or three months ago I was asked to come and see a gentleman whose chest was full of liquid. A brother physician, who attended the gentleman, and a very intelligent skilful physician too, thought that the liquid should be let out, that the operation should be performed. I differed in opinion, I would not sanction the operation; I am opposed to it, unless in cases of undoubted urgent necessity, where there is no other chance, and in that there may be a chance, of saving life. In tapping, a puncture made through the pleura will produce inflammation, and it is not easy to avoid such a consequence. It is now a question, whether this patient's case is one of uncomplicated pleurisy with effusion. In great probability it is not. A month ago he had shivering and fever, and was hoarse for a fortnight; he had also some expectoration, and pain and tenderness low down on his left side, in the lower part of the ischium. I have given him tartar emetic, calomel, and opium; if the case goes on favorably I shall blister him when the inflammation disappears.

CEREBRAL AFFECTION SIMULATING APOPLEXY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The publication of the following case may, perhaps, in some degree serve to illustrate the difficulty which sometimes attends any attempt to arrive at an accurate diagnosis in cerebral affections. It may be here remarked, that owing to the loss of consciousness and voluntary motion, some might have concluded the case to have been one of apoplexy; neither myself, however, nor coadjutors were of this opinion, from the circumstance of coma not having shown itself, a symptom which, I believe, in the large proportion of cases of sanguineous extravasation, may be looked upon as a distinguishing feature.

Reuben Johnson, aged twenty-three, of robust habit, and addicted to spirit drinking, was brought to the Lowestoft Infirmary, on Monday the 9th of November last, in the following state:—Was unconscious, speechless, and there was loss of volition; he had been employed on board a fishing vessel, and whilst in the performance of his duties he fell down in a state of insensibility, and remained in that condition for thirty hours before he could be landed. In addition to his other symptoms there was inability to swallow, with incontinence of urine and fæces; the pupil of the right eye was dilated at the same time that the left was contracted; pulse frequent; the scalp and cutaneous surface moderately hot. Upon inquiry into the history of his health, it appeared that previous to his attack on board of the boat he had been subject to fits.

He was bled to the amount of thirty ounces; two drops of croton oil were placed on his tongue, and a terebinthinate enema administered. The bowels were freely evacuated by these means, without, however, being followed by any mitigation of symptoms. The

purgative system was continued on the two following days, together with the application of cold affusion to the head. On the Thursday the bleeding was repeated, and blisters applied to the calves of the legs. On Friday he discovered signs of returning intelligence; swallowed some bland nutriment, and was enabled to articulate. In the evening he became frightfully convulsed, which continued all night, when he again fell into a state of insensibility, and died on the following morning.

Autopsy, Ten Hours after Death.

The whole substance of the brain presented a perfectly healthy appearance. Upon removing the cerebellum about an ounce of serum was found at the base of the skull, and on further inspection, the posterior clinoid process on the left side of the sphenoid bone was discovered standing out perpendicularly, elongated, and sharp as a pin's point. This appeared to be the only appreciable cause of the cerebral irritation.

I remain, Gentlemen,

Your obedient servant,

W. C. WORTHINGTON,

Senior Surgeon to the Lowestoft Infirmary.

Lowestoft, Dec. 1, 1842.

TARTAR EMETIC IN DISEASE OF THE JOINTS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Upon recently taking up the "Bulletin de l'Acad. Royale de Medicine," I met with a report on the use of tartar emetic by M. Gimelle, in the cure of dropsy of synovial membranes, and have since had a favorable opportunity of testing the merits of M. Gimelle's plan. Should you think the following case possesses any interest, I shall be obliged by your giving it a place in your Journal.

I am, Gentlemen,

Your obedient servant,

JAS. G. SLATER, Surgeon.

Geo. F., aged seventeen years, was following his occupation of miner when a large coal fell upon the knee, which compelled him to be carried home, and in two days I was requested to visit him. I found him laboring under considerable excitement, with a full, quick pulse, a loaded tongue, and confined bowels; the knee was much swelled, with great tenderness on pressure, and total inability to bear the least motion of the limb. I ordered twenty leeches, and hot fomentations to be used, and afterwards a poultice, and to have calomel, two grains, with six grains of comp. extr. of colocynth. On visiting him next morning, I found that the bowels had been freely moved; the skin was cooler, and the constitutional irritation much relieved; but the knee was more swollen, tense, and quite immovable; for ten days I had recourse to the usual remedies without any apparent diminution in the size of the joint, or any increased power of motion. At this time I recollected what M. Gimelle had stated of tartar emetic. I prepared a six ounce mixture, containing six grains of the salt, and desired it might be taken in twenty-four hours, which was done; the quantity was increased by

two grains per day, until the boy took sixteen grains in twenty-four hours; on the sixth day absorption commenced, and by the twentieth the knee was little larger than natural. The effects of the remedy were excessive alvine evacuations; great diminution in the strength and quickness of the pulse; weakness of the voice; profuse nocturnal perspirations; and the appearance of a leaden colored circle around the eyes; the appetite was good; the urine scanty; and at no time during its exhibition was there the least inclination to vomit. To the tartar emetic I ascribe the boy's recovery, and as the remedy to me was quite new, I feel it my duty to give it the publicity which it deserves, in the confident expectation that some of your numerous readers may be induced to give it a further trial.

Gomersal, near Leeds,

Nov. 30, 1842.

SWELLED LEG AFTER FEVER.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Should you deem the following case of swelled leg after fever of sufficient interest, I shall feel obliged by its insertion in the Provincial Medical Journal.

Yours respectfully,

J. T. JAMESON,

Surgeon to the Rochdale Dispensary.

Nov. 29, 1842.

It will be sufficient to state that J. H., aged sixteen, passed favorably through an attack of common continued fever, requiring, so far as depletion was concerned, merely the application of a few leeches behind the ears, on account of pain in the head. When the febrile symptoms had disappeared, and there was every prospect of a speedy convalescence, he began to complain of a most distressing pain in the lumbar region, so severe as entirely to deprive him of sleep. This pain continued unrelieved for a couple of days, notwithstanding the free use of opium. A strong turpentine liniment was then ordered to be well rubbed upon the part, and on the following day the pain in the back was much relieved; but he complained of a pain equally severe, situated behind the trochanter major, and beneath the gluteus maximus of the left side. There was no redness to be perceived, nor much tumefaction, but exquisite tenderness on pressure; bowels regular; urine, which had hitherto been high coloured and clear, exhibited a lateritious deposit. He was ordered to take two grains of calomel, and half a grain of opium, three times a day. The liniment to be continued.

I found next morning that he had passed a night of excruciating agony from the pain in his thigh. His sunken and haggard countenance bore ample testimony to the severity of his sufferings; the pain has left the back part of the hip and descended to the thigh, the whole of which is very much swollen, and exceedingly tender on pressure, particularly along the outer side and a little below the trochanter major; the pallor is not so marked as in phlegmasia dolens. Since the swelling of the thigh took place the pain has

been less excruciating. The limb was ordered to be gently rubbed with soap liniment, and afterwards wrapped in flannel; calomel and opium to be continued. In the course of this day, and the subsequent one, the swelling gradually extended to the leg and foot, that of the thigh remaining stationary. During the night of the 4th day of the attack he was seized with vomiting and purging; on the morning following the tumefaction of the thigh was observed to have diminished considerably, being softer and less painful on pressure; the swelling of the leg continued undiminished. To take half a grain of opium three times a day, in place of the calomel and opium, and a mixture of aromatic confection with a little aromatic spirit of ammonia; the liniment to be continued, and a flannel roller applied. After going on favorably for some days, the swelling and pain of the extremity fast disappearing under the use of the liniment and roller, he was seized with a severe pain in the left side, accompanied with an increase of fever, which gradually disappeared by the application of a few leeches, followed by a blister, and a little calomel and opium internally. With the exception of a slight swelling and tenderness on pressure affecting the right extremity, his convalescence from this period was uninterrupted. I had an opportunity of examining the limb several months afterwards, and found the veins to be slightly varicose, and some degree of swelling to exist, which, he informed me, subsided during the night, and appeared again in the evening, after standing at the factory all day. His general health was very good.

REMARKS.

The above case bears great resemblance to two or three interesting cases related by Dr. Tweedie, in vol. xxx. of the "Edinburgh Medical and Surgical Journal." It presents some points of difference, however, which I will briefly notice.

1. The subject of the present case was a male. Dr. Tweedie's patients were all females. He had been informed that one case occurred in a male, but he had not been able to trace the history or treatment.

2. In all the instances which came under his notice, active depletion had been employed in the treatment of the fever, so that the convalescence was rendered somewhat tedious. In the present case the treatment was particularly mild, eight leeches behind the ears constituting the extent to which depletion was carried.

3. In Dr. T.'s cases, local depletion was very actively made use of. In the present case, neither leeches nor cupping were resorted to. I may state that my patient, as soon as ever he felt able to accomplish it, was up and down stairs, and very soon after that he was at the factory, standing all day, and carelessly as to the proper application of the roller, which circumstances may, perhaps, be sufficient to account for the long continuance of the swelling of the limb, and the varicose condition of the veins. Had he remained in the horizontal position, with the bandage properly applied until the parts had regained their tone, and the general health been somewhat more restored, I am disposed to believe that the sequelæ above mentioned might have been prevented.

DIAGNOSIS OF CHOLERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Having read the papers which have recently appeared in your Journal on the subject of malignant cholera, and being deeply impressed with the importance of the subject, I make no apology for troubling you with the following remarks, which, for the sake of brevity, I shall offer in the form of conclusions deduced from actual observation and reflection. That they may not be regarded as theoretical, it seems right to state that I saw the disease at Musselburgh, Newbridge, and in the parish of Ratho, in Scotland, where I suffered from a very severe attack in my own person.

1. The term "cholera" appears to be quite inapplicable to the disease named "Asiatic or malignant cholera," whether we regard the symptoms or pathology of the disease. As this statement may be questioned by many, I will, as concisely as possible, mention the grounds upon which it rests, and which will suffice to show how little analogy there really is between the English disease, to which it is most justly applied, and that form which is to be considered in the sequel.

ENGLISH CHOLERA.

Diarrhœa and vomiting, accompanied with severe griping pain of abdomen, more especially about and below the umbilicus. The matter discharged in either may present an excess of acrid bile. The diarrhœa almost invariably preceding the vomiting, and both always persisting for some time, brief as it may be, in very bad cases, before sinking takes place. Urinary secretions, though diminished, never entirely suppressed. Cramps are common in the more severe cases of this disease; pyrexia frequent; pulse accelerated and wiry; thirst generally urgent. When the symptoms are not relieved the patient gradually sinks.

ASIATIC DISEASE.

Diarrhœa and vomiting may or may not be present. Diarrhœa not unfrequently exists for two or three days, but, being unattended by pain, attracts little or no attention. At the lapse of this time vomiting takes place, and collapse speedily ensues. In other cases collapse takes place without vomiting preceding it. It too frequently, however, happens that the premonitory state above described does not exist at all, but that the patient, without either diarrhœa or vomiting, is suddenly seized with prostration of power, and goes almost at once into the state of collapse, when diarrhœa, vomiting, cramps, burning heat at the epigastrium, occur. The pulse, at first slow and compressible, becomes small, and at last imperceptible; the eyes sunk in the orbits, and surrounded by dark areolæ; the cheeks hollow, and features sharp; tongue cold and clammy; voice reduced to a mere whisper; respiration not only feeble and slow, but on expiration imparting a sense of coldness to the face when brought near to the mouth of the patient; cramps almost incessant; the skin and integuments generally shrivelled and discolored, more especially about the fingers and toes, the nails of which are blue or livid. The craving for cold water is urgent, in consequence of the heat at the epigas-

trium; this being the real cause, it can hardly be described as thirst, which appears to be a mixed sensation.

The above scanty glossary would appear almost sufficient to demonstrate the irreconcilable difference between the two diseases; but when the total suppression of urine, and the character of the evacuated matters are superadded, the difference is too manifest to require any comment. It is only necessary to add, that in the common or English disease I have never, even at the very last, witnessed a deficiency of bile, but, on the contrary, and invariably, a decided redundancy; whilst in the malignant disease, although the first discharges may be dark, and even scybalous, I have never seen a trace of bile until the disease had manifestly yielded to treatment, and the liver was again not only acting, but even overacting, probably under the influence of the calomel, to which such happy result must be ascribed, and which undue action, when not restrained, may prove fatal.

On the diagnosis of the disease it seems unnecessary to say one word, as I am aware of no disease with which it can for one moment be confounded.

As to the origin or causation of the disease, it will be admitted that it has, in its most capricious course, set aside the laws of infection and contagion, of epidemic and endemic influence, although it has seemed at times subservient to all of these agencies. It has also, from the situations in which it has prevailed, effectually divested itself of the characters of diseases originating in malaria—as ague, yellow fever, dysentery, &c., confessedly do. That it is produced by some atmospheric cause, I entertain not a doubt, and that such atmospheric peculiarity is more immediately connected with electricity I feel equally convinced. This supposition is borne out by the fact of the great analogy existing between electricity and nervous influence; and the decided impression on most persons' nervous systems by that state of the atmosphere which precedes thunder storms, and against which but few persons are proof. If to this be added the sudden abstraction of nervous energy in the more severe cases of malignant cholera, this opinion will claim to itself more respect than may at first be awarded to it. That this impression is made directly on the cerebro-spinal system of nerves, and more particularly the respiratory, I firmly believe; and that the sensorium itself is only indirectly affected seems capable of demonstration. At present it is out of place to dilate upon this subject, but at an early opportunity it will, should it meet with your approval, afford me real pleasure to do so.

2. The above view of the causation of cholera naturally leads to the following conclusion as to its pathology, and upon which we may consider the whole of the phenomena of this most extraordinary disease to depend. For the sake of perspicuity, no less than for that of avoiding prolixity, I will now, with every feeling of deference to the opinions of my professional brethren who may differ from me, state my belief, that cholera is the result of the sudden abstraction of nervous energy from the cerebro-spinal system of nerves, and that this is amply sufficient to explain the source of those symptoms which, taken collectively, constitute the disease, and may in fact be justly regarded as peculiar to it. Some of the more

important of these symptoms I will now enumerate, and 1st, The altered state of the respiration.

2. The physical and chemical change in the constitution of the blood, which is abundantly proved both by ordinary examination and by chemical analysis.

3. The depressed and irregular action of the nervous system.

4. The suspension of the functions of the liver and kidneys.

The inference which I would draw from the co-existence of the above is, that in consequence of the sudden impression made on the nerves of respiration, the lungs do not adequately perform their office, the necessary result of which is the imperfect oxygenation of the blood, and its consequent unfitness for the purposes of life. Owing to this cause also, we have the impaired action of the heart and arteries, which are thereby deprived of their ordinary stimulus, to the very existence of which a due proportion of oxygen is admitted to be essential. The same cause explains the suspension of the secretions above mentioned, the organs being unable to act upon the morbid fluid circulating through them.

The nervous derangement I consider as dependent more immediately upon the effect produced upon the cerebellum and spinal nerves, if not confined to these; this opinion seems to acquire support from the fact, that in a vast majority of cases the function of the brain itself remains unimpaired, or at all events displays no irregularity up to the moment of dissolution. In this respect the phenomena of cholera display a very striking analogy to those attending the inhalation of poisonous gases, and more especially the carbonic acid gas. If further proofs of the correctness of the views which I have now ventured to express be required, these, I feel confident, will be met with by considering the effect of remedies on the disease.

From the length to which this paper has extended, I must now bring it to a somewhat abrupt termination, and were it not that the majority of the readers of your Journal are men both practical and experienced, I would feel considerable doubt as to the propriety of trusting so meagre an outline of so important a subject to their attention. This feeling, however, is much diminished by the spirit which has invariably pervaded the pages of your Journal.

I remain, Gentlemen,

Your most obedient servant,

GEORGE FIFE, M.D.

Newcastle-upon-Tyne,

Dec. 1, 1842.

ON THE
PRETENDED CURE OF CATARACT
BY
PRUSSIC ACID.

By J. B. ESTLIN, F.L.S.,

Surgeon to the Bristol Dispensary for the Cure of Complaints in the Eye.

The readers of the Provincial Medical Journal are much indebted to Dr. Hastings (and so would the public be, had they access to his communications) for his exposure of the pretence of hydropathy to cure all kinds of disorders. A multitude will always be found

in this country ready to become the dupes of those who boast, in an unqualified manner, of the efficacy of some particular remedy in the removal of every complaint; and it is not to be expected that persons will be wanting ever ready to turn this credulity to their own advantage, especially when they can persuade the public press to assist in the delusion. From this willingness to be deceived, Perkins's metallic tractors, animal magnetism, mustard seed, brandy and salt, homœopathy, hydropathy, &c. &c., have had their rise in popular estimation, and have had (or are having) their decline. I cannot admit that these vagaries do any injury to the regular practitioner; on the contrary, those in whose cases these professed remedies have proved inappropriate, and those who have been injured by them, are often driven to solicit his advice; and notwithstanding the continual discovery of remedies which, it is affected, will cure every complaint, and which should render the farther study of medicine a work of supererogation, there never was a period when our art was cultivated with more industry, when more minds of a high caste were devoted to its improvement, or when it held a more elevated rank in the estimation of the intelligent part of the community, than at the present moment.

A duty, however, appears to devolve upon the regular practitioner, and especially upon those who cannot be supposed to have any personal interest to serve in the matter, to prevent, as much as they can, a valuable remedy from getting into disrepute from its abuse, and to show the fallacy of ascribing curative powers to others totally destitute of the agency attributed to them. But is it not the case that those to whom the community have a right to look up for guidance in these matters, are too reluctant to come forward to disabuse the public mind on the subject of such pretended remedies?

Dr. Hastings has set a good example in this respect, and I am induced to follow it in illustrating by a case the folly of trusting to the promise which has been held out that *cataract* may be cured by the external application of the vapor of prussic acid, without operation.

To any educated surgeon it must be unnecessary to prove the futility of attempting the removal of a cataract—a hard tumor nearly in the centre of the eye, covered by a tough membranous capsule, ceasing probably from disease to have any organic relations with surrounding parts—by the application of a vapor to the cornea. The removal of opaque deposits upon the cornea itself by similar means I believe to be equally impracticable, but I now confine my remarks to cataract.

Though frequently asked by patients if I had heard of the powers of prussic acid in removing some of the most incurable or difficultly managed diseases of the eye, I was not aware of the monstrous pretensions that had been set up, and widely disseminated in newspapers and other periodicals not devoted to medical subjects, until the following case had come under my care:—

Mr. C., lately established in business as a draper, came to me from a town in Somersetshire on the 13th of October last to consult me respecting the state of his left eye. He was laboring under an acute attack of sclerotic inflammation, extending to the chambers

of the eye, with the usual symptoms of pain and intolerance of light, &c. &c. The anterior chamber was rather hazy, the lens was opaque, but its surface too clouded to be distinctly defined. The mode of treatment was clearly indicated. I recommended leeches, fomentations, mercury till the gums were affected, and the application of an opiate solution within the lids. The patient gave the following account of himself:—

He had for some time been the subject of cataract in the left eye; being desirous of its removal, he had consulted Mr. John Soden, of Bath, who advised him, as his power of seeing with the right eye was very perfect, not to undergo an operation upon the left. Having seen in the Bath newspapers an article copied from the "Literary Gazette," stating upon the *authority of the editor* of that periodical, that a certain physician in London cured cataracts by the application of the vapor of prussic acid, he went to London and placed himself under the care of this practitioner, who gave him every encouragement to believe that the cataract would speedily be dissolved, and who daily applied the prussic acid, expressing himself satisfied with the progress of the cure. At the end of two or three weeks, finding his eye not improved, Mr. C. said he could remain no longer in London; the physician then *performed an operation* upon the cataract with an instrument, which was followed by the violent inflammation I saw, and while suffering from it he was obliged to return into the country.

This is the history with which my notes of Mr. C.'s case, when I first saw him, furnish me. But that I might not misstate his account I will quote his own words, subsequently conveyed to me in a letter, omitting some natural expressions of indignation, and giving him credit for sincerity in declaring his wish to have publicity given to his case, not for "the gratification of private revenge," but "for the benefit of others."

"For four consecutive weeks did he apply the prussic acid to my eye. The method which he practised was this. I applied to him; he examined the eye, and professed to restore it to perfect health in a few days by the external application of prussic acid. He applied it to the eye; each successive day he appeared to discover an improvement, and repeatedly declared to me that he had known a cataract dissolve in twelve hours after the application of the acid. I consequently expected to awake some morning in the full possession of brilliant sight. He did not perform the operation which has caused me so much agony till three weeks had expired, because not till that time had the prussic acid *made the cataract to form on the surface of the eye.*" Mr. C. states that during this attendance he paid the usual physicians' fees. After pursuing the plan I had prescribed for him, Mr. C. writes me word, the pain and inflammation gradually subsided, and at the date of his last letter (November 16), he expected in a few days the inflammation would be entirely removed; neither the prussic acid, however, nor the operation had dispersed the cataract.

Such, then, is one of the attempted cures of cataract by means of prussic acid. Had it been merely an instance of the failure of ordinary means, or even of a reasonable experiment in effecting the desired end, I should not have brought it forward; for all medical men have

occasionally to lament the failure of the best intended efforts for the relief of their patients. I adduce it as an example of measures utterly inadequate to the professed object, recommended and employed with the most unwarrantable promises of success, their insufficiency being admitted by recourse to an operation, which also proved unsuccessful.

The above case induced me to refer to the published statements which tempted this unfortunate patient to disregard the judicious advice of Mr. Soden, and to submit himself to the prussic acid treatment. I have in vain tried to procure in this city the opportunity of referring to the back numbers of the "Literary Gazette;" but "Chambers's Edinburgh Journal" for July 16, 1842, speaks of the "Literary Gazette" for July 11, 1842, as containing the account of the wonders performed by prussic acid, "the name of whose editor," says the "Edinburgh Journal," "is a sufficient guarantee for the accuracy of the statements." These statements are, that the editor of the "Literary Gazette" "*saw*" the various stages of cure advanced by the application of hydrocyanic acid to the eye in "opacities of the cornea, inflammation, cataract, amaurosis, iritis, &c. &c." The editor witnessed "the various appearances of films removing, cataracts breaking up and being gradually reabsorbed, pupils being redeveloped, and other altogether extraordinary symptoms of remedy and regeneration." "Other cases there were of the wonderful production of vision to those born blind." The editor exclaims, "Why not at once make known this discovery to the Prince of Hanover!" and concludes his article by saying, "We hesitate not strongly to recommend the wonderful discovery for the cure of blindness."

I should not have encroached upon your space with such extracts as the above had they not been from papers of good reputation, whose respectable editors cannot be aware of the extent to which they are misleading the public, the articles having no appearance of being inserted as ordinary quack advertisements.

It would be well if the conductors of our respectable periodicals would consult some judicious medical friend before they gave circulation to such extravagant statements, relating to the cure of diseases, as those now presented to the readers of the Provincial Medical Journal.

Bristol, November 30, 1842.

ON PREPARATIONS OF THE CITRATE OF IRON.

By M. MIALHE.

The "Journal of Chemistry" gives the following formula for the preparation of the citrate of iron:—Take, of crystallised citric acid, three parts; hydrated peroxide of iron, two parts; distilled water, twelve parts. Boil together until the oxide is completely dissolved; then filter and add enough of water to replace what has been evaporated, and make up twelve parts of fluid. If we wish to obtain the citrate dry, a layer of the fluid is placed on a square of glass and evaporated in the stove. The citrate of iron thus obtained is of a fine rusty red color; dissolves perfectly, though slowly, in water; is of a strongly acid taste, astringent, and slightly styptic.

Within the last few years—that is, since the citrate of iron has been introduced as an article of trade—two very distinct varieties are to be found in chemists' shops. One presents the characters just mentioned, and is the pure citrate of the peroxide of iron. The other is the preparation of a very different kind; it dissolves much more quickly in water, and the solution, instead of being of a yellowish red, is of a yellow green color; its taste is rather alkaline than ferruginous; in a word, it is a double citrate, containing a greater or less proportion of soda or ammonia.*

Now, as it seems clear that these two preparations must possess different medical properties, I think that physicians would do well if they would distinguish, in their prescriptions, the acid from the alkaline preparation.

EFFERVESCING CALYBEATE WATER.

Water, 625 scruples; dry citrate of iron, 1 scruple; citric acid, 4 scruples; bicarbonate of soda, 5 scruples; add first the citrate of iron and citric acid; then the bicarbonate of soda, taking care to cork the bottle at once, and secure the cork.†

This latter preparation has very little metallic taste, and is quite as agreeable as the Vichy water; when mixed with wine it does not render it turbid as Vichy water does, and is certainly a more active remedy.—*Bul. de Therapeutique*, August 15, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, DECEMBER 10, 1842.

We have this week to lay before our readers an instance of the exercise of unconstitutional and despotic authority on the part of the poor-law commission against one of their medical officers, which is, we believe, without a parallel even in the proceedings of that irresponsible body. An accusation had been made before the board of guardians of Upton-upon-Severn, Worcestershire, against Mr. Morison, of Malvern, a medical officer of one of the districts of this union, stating that he had three several times obtained a bottle of port wine on account of the union for a pauper patient, and that on each occasion he had withheld the wine, or a portion of it, from the purposes for which it was designed, and given the medicine (bark) intended to be mixed with it in water, or some other fluid. The charge was a most serious one, and unquestionably demanded a careful investigation, and one of the assistant-commissioners (Mr. Power) was sent down on the part of the poor-law commission to preside over and conduct the inquiry. The result was to be laid before the Somerset-house

board, and an immediate decision on the case promised. After an interval of three weeks, no communication that we can learn having been in the meantime made to the accused or to his legal adviser, the office is advertised as vacant. From the evidence given during the inquiry conducted by Mr. Power, it would seem that the charge originated in the private malice of one of the guardians, and if the published report, which is full, and bears every appearance of accuracy, be correct, although an adulteration of the bark mixture seems to have taken place, Mr. Morison stands completely exonerated from the charge.

The material portion of the evidence, bringing Mr. Morison in contact with the wine, is that of Hannah Costens, Elizabeth Ritt, Mr. Richard Winnall, and Hannah Hope; and however difficult it may be to account for the adulteration of the bark and wine mixtures, a candid examination and comparison of this evidence does anything rather than fix it on Mr. Morison, whose general humanity and liberality to his pauper patients were certified to by the most respectable and competent witnesses. Who the guilty party really was is another matter, and in the present state of the question we are not disposed to imitate the palpable injustice of the poor-law commission, by attempting to fix upon any individual the imputation of such a fraudulent transaction.

This, however, is not the point of general interest in the inquiry. However we may sympathise with Mr. Morison, as the victim of calumny and persecution, the bearings of the question are far wider than the mere establishing of the guilt or innocence of any single individual. The proceedings involve the violation of those principles of equity and justice which are or profess to be interwoven in the very groundwork of all our institutions. A disgraceful charge is made against an officer of a public establishment. It is investigated at a meeting presided over in the capacity of judge, by a person—appointed by whom?—by the source of all judicial power? No! but by an irresponsible board, called into existence under an act of the legislature, at variance, we hesitate not to say, with the privileges, and contrary to the feelings, of a large majority of the nation. This individual summons the accused party to trial, without notice, although on application he subsequently allows a single day for the collecting of witnesses and the preparation of such a defence as the hurried and uncertain nature of the proceedings will admit of. He summons witnesses already prepared on the other side, administers oaths, and conducts the whole inquiry after the manner of a court of justice, with this single and most vital difference, that in his own individual person, or in that of his irresponsible superiors, are combined both the judge and the jury, without power on the part of the accused of challenging the one or appeal from the other.

* These observations are equally applicable to the species of citrate of iron found in English shops, and the practitioner would do well to remember the marked difference which exists between them.—*Eus*.

† This preparation seems to be very similar to the "aqua calybeata" of Messrs. Bewly and Evans, for which it may be advantageously substituted.—*Eus*.

When we first saw the published accounts of this^s investigation, about three weeks ago, we considered its termination in the acquittal of Mr. Morison from the charge brought against him so certain, that we did not even think of transferring a notice of the case to the pages of this Journal. Certainly we could never have imagined that, involving as it does a judicial procedure, the poor-law commissioners would have *dared* on their own responsibility, and after an inquiry so informal and irregular, in the event of their being of a contrary opinion, to have taken any other step than the commencing of a criminal prosecution, in which the accused would have fair play, before a jury of his countrymen, in a legal court, and presided over by an authorised and competent judicial authority.

The charge is, in fact, one of felony, yet is the accused placed upon his trial, condemned, and punished by an anomalous and unconstitutional tribunal, without the Englishman's boasted privilege of submitting his case before a jury of his peers. The constitution of military and naval courts of inquiry has often been complained of, but even in these, though the functions of judge and jury are combined, the members of the court martial are men of high and honorable character, known and looked up to in an honorable profession, and, moreover, of the same rank and grade in society as the accused. Their decision, also, whatever it may be, requires the confirmation of the sovereign before it can be carried into effect, and in accordance with those principles of merciful consideration, which should never be separated from an earthly judge, often mitigated.

For a parallel to the mockery of trial which has here taken place we must look elsewhere than in a country of free institutions. Constantinople or St. Petersburg might, perhaps, furnish us with an occasional instance of injustice equally atrocious in fact and in principle; or the councils of the secret Three, which at one time ruled with iron hand the destinies of Venice, might, if these arbitrary infringements of civil rights were recorded, reveal many such. No such court as that of the poor-law commission, the Star Chamber excepted, has been recognised in this country since the days of the Saxons, and if this court is still to deface the annals of the present reign, most fervently do we hope that it will be deprived of a portion at least of its arbitrary power, and that all judicial proceedings will be taken from it, and be restored to the lawful judge and jury as heretofore.

But what ought the members of the medical profession to do to protect themselves against like attacks, to preserve their characters and professional existence under the paltry charges which any malicious person may thus trump up, and with a certainty of finding support, even in the teeth of evidence to the contrary, from a poor-law officer? If they would

but act together, and support each other, there would be little real difficulty. In the case before us no respectable medical practitioner in the neighbourhood can, for an instant, dream of coming forward as a candidate for the vacancy advertised; and should there be any attempt to introduce an adventurer from a distance, he ought to be at once refused all countenance by the whole profession. The conduct required is quite independent of the question of guilt or innocence of the accused person; it is the civil rights of the union medical officers generally which are at stake, and self interest alone, if no higher motive, ought to bind them together. The charge was a criminal one; the assistant-commissioner knew that it was, and that he was incompetent to entertain it, or to deal with it. But the occasion for the exercise of a little brief authority was too tempting for the poor-law commission, and they take upon themselves the office of judge and jury, and find the accused guilty upon evidence which no authorised judge in the land would have sent to a jury—upon evidence which no twelve honest men in the country would for one moment have listened to. Should such a charge be again made, let the accused at once protest against the authority of the court, and refuse to be tried by any such tribunal. The commissioners may, it is true, dismiss him from his office, but they cannot, in so doing, brand him as a felon, nor send him prejudged to be tried by the laws of the land.

The recent occurrence at the Medico-Chirurgical Society, and the letter of a highly esteemed correspondent, which we publish in another part of the Journal, induce us—unwillingly, we confess—to recur to the subject of animal magnetism.

We have been accused, in common with other members of the medical press, and with the immense majority of medical practitioners, of opposing the investigation of truth. We cannot plead guilty to a charge of this kind, and to prove that we are willing to follow the march of knowledge (provided we have decent company on the road), we shall here reprint some observations on the subject of Mesmerism, which we published many months ago.

“We are not of those who would reject, *a priori*, mesmerism, magnetism, neurohypnotism, or whatever else it may be called, as an absurdity unworthy the notice of rational beings. There may be things of which our philosophy hath not dreamed—the nervous system may give rise to phenomena irreconcilable with our present ideas, and utterly incomprehensible in the present state of our knowledge; hence we are not to reject facts because of our inability to comprehend them, nor is it consistent with true science to declare every phenomenon absurd which may not tally with existing ideas.

We do not, therefore, refuse to discuss the facts

and experiments brought forward by the disciples of Mesmer, or the more recent curiosities of the hypnotologists, because we deem them absurd, or unworthy of record in the pages of a scientific journal, but for the following reasons, which we shall endeavour to comprise in as brief space as possible.

It is clear that if the phenomena of magnetism are to be examined in a scientific manner, they must be examined as part and parcel of human physiology. Animal magnetism, divested of its mysteries, is merely a certain influence, the nature of which is unknown, but which is said to produce certain effects on the living body. These effects are chiefly, if not exclusively, confined to the nervous system. The influence is said to be conveyed from one living body to another by means of certain manipulations, or nervous phenomena are said to be excited in an individual by certain acts of his own. Now, we repeat that all the questions involved in this matter are questions of human physiology, and should be resolved in the same manner as other questions connected with physiology. Whenever this shall be done—whenever any competent, honest, and impartial observers, shall investigate the phenomena alluded to in a scientific spirit, guided by the rules common to all scientific inquiries, and evidently seeking truth for truth's sake—then shall we directly publish the results of their researches, and direct public attention to the subject of their inquiries—but not till then. Can any one for a moment pretend that the melancholy exhibitions which afflicted the friends of medical science in London a few years back, or the half-crown prelections of itinerant orators in the provinces, should be confounded with scientific demonstrations? Has a similar course been pursued with respect to any other physiological investigation?—or can any faith be placed in facts, any weight attached to experiments, which are thus forced upon the public to gratify personal vanity or a despicable love of worldly gain? Assuredly not. A crowded theatre is not the place in which a complex and highly difficult problem of physiology can be solved, nor are the *petit-maitres*, either of town or country, proper judges of a subject which, if it be not a vain dream, involves the most extraordinary and mysterious train of phenomena that have ever been submitted to the intellect of man.

Let us have any facts from a respectable source—the history of any experiments performed in a scientific manner, and by men who are above reproach—and we shall pay to them the attention which they merit; but we shall not indirectly assist a parcel of charlatans, fools, or designing philosophers, to disgrace their profession, and extract money from the pockets of the public, under pretence of the pursuit of truth.”

In the preceding observations we cannot find a single expression which, on mature consideration, we feel called upon to retract. The dignity and respectability of the medical profession have received a heavy blow from the mountebank exhibitions of medical Mesmerisers; and, in our humble opinion, it behoves every true member of that profession to discountenance such proceedings in the most decided manner. The existence of some feeling of this kind readily explains the reason why medical men have hitherto

avoided contact with professional magnetisers; but their disinclination to investigate the subject might, perhaps, be justified on different and more rational grounds. Mesmerism has frequently been weighed in the balance of scientific investigation, and found wanting. On every occasion that the alleged phenomena of animal magnetism have been carefully examined and tested by scientific men, they have been proved to be delusions. It is unnecessary to cite examples from foreign countries; the test has been applied at home. Mr. Wakley proved, in the most decisive manner, that Dr. Elliotson had been grossly deceived by the Okeys. But it may be said, though the Okeys were imposters, and Dr. Elliotson rather soft, it does not follow that all other examples of Mesmeric power are delusions. To this we would reply, that there are limits to human patience, although there be none to human credulity. Where imposture has been proved in numerous series of phenomena, it were unreasonable to require any investigation of analogous occurrences. Without some limitation the thing would never have an end; for, after the exposure of any given deception, a fresh claimant would arise, declaring himself to be the true prophet.

But if we give way to our reflections we shall never have done ourselves; we, therefore, conclude, as we commenced, by assuring our respected correspondent that we are not opposed to the investigation of truth, and that we would willingly see the *rational* questions which he proposes, submitted to careful, and properly directed, inquiry. They are, however, in no way connected with Mesmerism.

CLINICAL

LECTURE ON LITHOTOMY,

By WILLIAM FERGUSSON, Esq.,

Professor of Surgery in King's College, and Surgeon to King's College Hospital.

October 27, 1842.

GENTLEMEN,—Although I stated at a previous lecture that I was unwilling, at this period of the course, to occupy your attention with such a subject as lithotomy until I should have noticed many others of more common occurrence in ordinary practice, I still feel reluctant to permit our present opportunities to pass without some reference to the operations which you have lately seen performed, as I may possibly not have cases at another time, when, as your studies have advanced, you will be more prepared to understand all that may be said on a subject which usually is looked upon as one of considerable difficulty, and only to be studied by those who have become familiar with the more common cases in surgery.

Some days ago you saw me operate for stone on a child six years of age, when I gave you the history of the case, and my reasons for performing lithotomy. Two days after I performed a similar operation on an adult, and this case I mean to make the subject of this day's lecture.

CASE.—Edward Minister, aged seventy-five, was admitted October 8, 1842. Born in Norfolk, of a Norfolk family on both sides. An uncle on the mother's side died above a hundred years old with stone in the bladder. All his family have been long-lived.

About thirty-six years ago he suffered violent pain in the left loin, which lasted for a fortnight, and then subsided suddenly, having seemingly followed the course of the ureter. He passed no blood or gravel that he was aware of, and continued well for about sixteen years. Twenty years ago he had a similar attack, which terminated on his passing a calculus about half the size of a coffee bean, and he has been subject to similar attacks occasionally ever since, but never passed any stone or gravel. For the last fifteen years he has passed urine mixed with ropy mucus and blood, but has never noticed that it was caused by unusual exercise. More than eight years ago the patient first observed his water stop suddenly while he was passing it, but it would flow again when he changed his position. He has continued with these symptoms, varying in intensity, to the present time, and has latterly suffered great agony, being obliged to keep almost constantly in bed, and to void his urine every half hour. He had been sounded repeatedly by different practitioners, but a stone had not been detected until about eight months ago, when Mr. Fergusson first saw him.

October 15. Since the admission of this patient his symptoms speedily became less distressing, and he is now able to retain his urine for six or eight hours at a time. At half-past one to-day Mr. Fergusson performed the operation of lithotomy upon him, and extracted a stone of considerable size, weighing nearly two ounces, and measuring five inches and a half in circumference, of the mulberry character, but coated externally with a phosphatic deposit.

16. After the operation until two o'clock this morning he has remained in a state of collapse, with small and frequent pulse, cold extremities; would take nothing but a tablespoonful of brandy and water at a time, which he vomited almost immediately. Various cordials were administered; laudanum and creasote were used, but with no good effect. From two o'clock till eight he gradually rallied, but again fell into a state of great depression; he now sunk into a quiet sleep, and awoke after six hours much refreshed. Pulse stronger; surface more natural, and no disposition to vomit; bowels have been opened thrice since the operation; urine passing freely by the wound. Has partaken of tea and coffee at different times, and in the afternoon has had a pint of arrow-root with wine. In the evening, pulse has become hard and frequent; tongue dry, and slightly furred; no tenderness over the region of the bladder; less water has passed than during the previous evening. To have a drachm of liquor ammoniæ acetatis every hour.

17. Slept well, and feels refreshed and cheerful. Pulse fuller and slower; tongue moist; skin warm; no lymph effused on the wound, which looks as if made only a few hours before. In the evening, symptoms much the same, but inflammatory action in the wound, the surface being now coated with lymph. Omit liquor ammoniæ acetatis. To have half an ounce of castor oil.

November 9. Five days after the operation a film

of slough separated from the surface of the wound, which then assumed a healthy appearance, and has gradually continued to close. The water still passes by the opening, although occasionally a few drops have come by the natural tube. A catheter was passed by the penis on the 3rd instant, and again yesterday, without either difficulty or pain. Sleeps well; appetite good; bowels regular; requires no medicine, and has no complaint excepting weakness, and from the urine not coming the regular way.

When this patient first presented himself to my notice, I felt assured that nothing could relieve him from his sufferings but an operation; and, from various features in the case, concluded that lithotomy was the only eligible mode of procedure. Considering the size of the stone, the age of the patient, and particularly the pain he suffered under the process of sounding, I could not hope for a favorable result from any lithotritic proceedings, which, under the circumstances, I could only anticipate would be of a very protracted and uncertain kind. At the same time, I could not feel sanguine as to the success of lithotomy, as the advanced age of the patient, as well as the supposed magnitude of the stone, were formidable objections to such a step. In giving my opinion of the case, I stated these circumstances to the patient, and at the same time, as he seemed to be in excellent health otherwise, that there was nothing to induce me to suppose that the operation would be more than usually hazardous, that I should undertake it if he thought proper, but that I should leave it to himself and his friends to determine whether he should incur the risk necessary to relieve him from his distressing complaint. Shortly after I learnt that he himself had a wish to submit to an operation, but his friends dissuaded him from it, until, after the lapse of more than half a year, his sufferings becoming extreme, and feeling his life a burden, he was induced to ask me to do what I thought best for him. Having had no reason to alter my original opinion, I therefore determined to perform lithotomy; and you saw me do so in the manner in which I am usually in the habit of performing that operation.

As a looker-on and pupil cannot fully appreciate all the steps, I shall now detail them as they were conducted in this case, and make such remarks as may serve to elucidate the nature of the whole proceeding.

First, as this patient seemed to have suffered more than usual irritation previous to his admission, I deemed it advisable to delay the operation until the bladder should assume a more healthy condition, and with this view he was kept quiet in the house, and ordered small doses of carbonate of soda with pulv. rhei, in the hope that the urine might be rendered less irritating, and that the bowels should be freely evacuated. I wished him also to become, in some measure, accustomed to his new bed and strange attendants; for, though not in the habit of resorting to much preliminary treatment in such cases, unless evident circumstances should render this necessary, I deemed this one requiring more than usual attention. You saw that the patient improved during his residence in the house, and supposing that he could not possibly be under a more favorable state than at that time, I fixed on the 15th of October for the operation.

When the patient was placed on the table, the first step in the proceedings was to introduce the staff, a manoeuvre which, in my opinion, should in general be effected before the patient is tied up, and one which should be done slowly and carefully, so that the operator may feel quite assured that the point of the instrument is actually within the bladder. Sometimes, when the stone is difficult to detect, it may be advisable to use a sound immediately before the staff is inserted; but here the object was so palpable that the latter instrument was at once laid against it, and thus I was assured that the staff was most favorably placed to act as a guide to the bladder for both knife and finger. The handle of the staff was then given in charge of an assistant, and the patient was next tied up in the usual manner, when you saw me, after laying within my reach all the instruments I was likely to require, sit down opposite the perineum, and proceed with the operation. Whether you have examined the prostate through the rectum at any previous period or not, it is as well at the present time to introduce the finger into the gut, as you can thus appreciate, in the most correct manner, the depth of the gland from the surface of the perineum.

Having done so, I then made the first incision through the skin and cellular tissue immediately below. The wound extended from an inch and three quarters in front of the anus, more than an inch behind that aperture, and beginning a little to the left of the raphe, was continued on that side of the perineum, passing about midway between the anus and tuberosity of the ischium. Again the knife was applied to divide the cellular tissue in the upper or fore part of the wound, when the forefinger of the left hand was thrust into the gap, so as to enable me to feel the groove in the staff. I then introduced the point of the knife, keeping it slightly above the line of my finger, and having assured myself, by moving it against the metal, that it really was within the groove, I then carried it onwards until it reached the bladder. In this movement I imagine that I laid open the membranous portion of the urethra, divided the fibres forming Wilson's muscle, a few of those of the levator ani, and cut a notch in the anterior part of the prostate gland. The knife was then withdrawn, and the point of the left forefinger having been placed against the groove, was pushed along into the bladder with a degree of force, which, besides causing dilatation, in all probability produced slight laceration likewise. Having felt the stone, and placed the finger upon it, the staff was removed, and the forceps were then introduced along the back of the finger, the latter being gradually withdrawn as the former passed deeper. It would be perceived that, as soon as the instrument had entered the bladder, a gush of urine occurred, at which time the blades were opened, and the stone was immediately grasped. Previous examinations had led me to expect that the stone was of considerable bulk, and accordingly I was not astonished to ascertain the reality of this conjecture. I knew that extraction could not be accomplished at once through such a wound as that which I had made, but I supposed that with a little patience and a proper use of the forceps and fingers, I should at last succeed without again having recourse to the use of the knife. With these views, then, I commenced extraction, and

the first movement was one which I invariably make at this period of the proceedings—viz., turning the forceps and stone in such a manner as to make sure that no part of the wound or bladder had been grasped along with the calculus; being satisfied on this point, I then began to draw the instrument towards me, and in doing so moved the handles in various directions, taking care that the greater part of the force should be in a line towards the floor, so that the stone should be brought through the middle of the wound, and the widest part of the perineum at the same time. Occasionally, as you would perceive, the fingers of the left hand were put upon the wound, to keep the parts steady, and force back any object that seemed to impede the outward progress of the stone. During these movements I felt the textures gradually yielding, and that the stone was coming towards me. Had this not been so, I should have introduced a probe-pointed blade, and enlarged the wound, by cutting an additional portion of the left lobe of the prostate, or probably dividing any texture that seemed to offer resistance. By a steady and, as I imagined, well-directed force, the proceeding was accomplished, and thus the operation was completed; but you will remember that immediately after extraction I removed with the knife a pellet of texture from the surface of the wound, which I stated at the time might either be a portion of the fat and cellular tissue of the perineum, or possibly a part of the prostate gland. Perhaps it was of no moment whether I left this or removed it, but I preferred the latter, under the impression that the surface of the wound would thus be rendered more smooth, that the urine would get more freely away, and that there would also be left a smaller extent of surface, with which that irritating fluid would come in contact. I did not anticipate any evil results from this proceeding, and therefore had no hesitation in taking the substance away. The perineum seemed deeper than I could have imagined in a patient somewhat emaciated in all other parts of the body, and I was of opinion that the loss of substance here would cause no serious harm, even under the supposition that it was a part of the prostate. At the time I fancied that it might be the middle lobe of this gland in an enlarged condition which had been partially dragged away by the rough surface of the stone, but on reflecting afterwards that I had not felt any remarkable enlargement of this part when I first carried my finger into the bladder, and also that the substance removed by the knife was separated close to the skin, and therefore far from the prostate gland, I could not suppose this to be the case. Dr. Todd has since examined the texture under the microscope, and states that it certainly is not a portion of the prostate, although it does not show the ordinary characters of fat and cellular tissue. Whatever it may have been, you have had an opportunity of observing that its removal has produced no injurious result. The urine has been tardy in resuming its natural course; the wound in the perineum has been somewhat longer of closing than usual, probably on account of this loss of substance, although, after all, the greater part of it has healed more rapidly than might have been anticipated at the patient's advanced age, and in a case where the aperture was of necessity larger than the average extent.

The history of this case, since it came under your notice, gives a fair illustration of an ordinary example of the kind, wherein an operation has been successful. No peculiar treatment was resorted to before the proceeding, excepting what has been already referred to; no unusual difficulty was experienced in cutting into the bladder or extracting the stone further than had been anticipated, and after the shock of the operation had gone off there was not in the whole progress of the case a single bad symptom. According to my usual custom, I made a free opening in the skin, but a very limited one internally. This, doubtless, caused more difficulty in extracting the stone; and the advocates for free incisions in the neck of the bladder contend that both contusion and laceration are thus produced. Even admitting this (and I am not prepared to deny it), I believe that there is less danger in such a mode of operating than by a free division of the prostate with the knife. So long as a portion of this gland remains entire, I am of opinion that there is less chance of inflammation extending from the surface of the wound to the bladder and peritoneum, and less probability of infiltration of urine than when the parts have been extensively divided with the knife. With a very large stone I should not hesitate about taking the latter course, if I found that division of a portion of the right lobe of the prostate, as well as the left, would not suffice, but with such a stone as you saw removed in this instance (one far above the average size), an additional incision was not deemed necessary; and as the result of this practice is probably the best means of judging of its value, I need only refer to it in this instance. I do not ground these opinions, however, on one example alone, but on many, which I have witnessed, both in my own practice and that of others. In various instances in which you have seen me perform lithotomy in this theatre, I did not find it necessary to use the knife after my finger was once in the bladder, and in all these a very limited incision was made in the deep part of the wound, yet there has been neither serious difficulty in extraction nor bad results afterwards. The boy on whom I operated two days before this old man was cut, was treated in this way, and the result has here also been most satisfactory.

The progress of the case since the few first days after the operation, affords me no opportunity for especial remarks. It was stated in one of the reports in the case-book, that a slough had separated from the surface of the wound, but this, as you may remember, was a very small one, and such as is often seen in similar instances. The urine leaves a concretion on the surface, and, mingled with the layer of lymph first deposited on the wound, forms a cake, which assumes the appearance of a slough of thicker dimensions than it is in reality. Perhaps in these cases there is no loss of the original textures, the newly formed lymph being all that is thrown off with the concrete surface.

Nov. 24. Since the last report the patient has gone on favorably. He now walks about the ward in excellent health and spirits for one at his age. Part of the urine still comes by the wound, which is now closed to a small point. A pad has been ordered to be retained with a T bandage, and the orifice has been touched with the sulphate of copper.

CLINICAL LECTURES

DELIVERED AT THE

METROPOLITAN FREE HOSPITAL,

BY MR. BENNETT LUCAS,

Senior Surgeon to the Institution, and one of the Lecturers on Anatomy and Physiology at the Westminster Hospital School of Medicine.

Lecture I.—Nov. 18, 1842.

GENTLEMEN,—It has been the usual custom, since the foundation of this medical charity, for the physicians and surgeons connected with it to offer practical observations to the students in attendance upon its practice, on the nature of the several cases, as each presented itself; and to follow up, as far as the peculiar constitution of the charity permitted, the history of each case and the effects of the remedies prescribed, from the time the patient was first admitted, to the period of his name being erased from the books, or to his having delivered up his letter.

In addition to this beneficial method of practical instruction, the physicians and surgeons have deemed it advisable to deliver distinct and regular courses of lectures, which will embody the most instructive cases; by which arrangement many circumstances connected with their history, nature, and treatment, which might have escaped observation, or which might not have impressed themselves forcibly on the mind of the student, will be again brought before him and fixed more permanently upon his remembrance. In pursuance of these intentions, I have been requested to give the introductory discourse, and I shall avail myself of the present opportunity to make a few observations upon the constitution and objects of the Metropolitan Free Hospital, and upon the materials it affords for accomplishing our purpose.

The Metropolitan Free Hospital was established in the year 1836, and since that time to the present it has unostentatiously and steadily progressed in extending the benevolent intentions of its supporters, and in acquiring the countenance and good wishes of the public generally. When it was first established, it rested its claims to public support and confidence on the grand principle of not requiring at the hands of any patient a letter of recommendation from a governor. Destitution and sickness have always been recognised as the only passports essential to the admission of their unfortunate representatives; and it is not advancing too much, when I state that in this particular the Metropolitan Free Hospital differs from many of the medical charities which abound in this metropolis.

As you may readily anticipate, the moment the existence of such an institution became known, crowds of poor patients thronged its doors—a fact which at once testified to its value and indispensability; and the yearly increase of patients from its foundation to the present time is a further proof of the great amount of good it has been daily effecting, and of the confidence the poor patients themselves have in the means placed at the disposal of the medical officers for their relief, and in the manner such means are employed. The founders of the institution, in their zealous anxiety to emulate the philanthropy of other but wealthier medical charities, and accommodate a number of in-door patients—and cal-

culating upon being supplied with means to effect so desirable an end—named their institution, in anticipation, “The Metropolitan Free Hospital.” They immediately established a building fund, which has been gradually accumulating, but which, I am sorry to say, is even now far short of this desirable object. Our operations have, in consequence, been confined for the most part to what is generally known by the term dispensary practice; but, at the same time, whenever an urgent case requiring operation presented itself, it has always been received. On many occasions, also, when patients desired to have operations performed at their own houses, and where nothing to forbid doing so presented itself, we have invariably acceded to their wishes; I have thought it my duty to offer these preliminary remarks in explanation of the name under which our institution is flourishing, and I trust is rapidly progressing to the consummation we all wish for, in consequence of our having been accused of assuming a position for the charity to which it had no title. Hospital, infirmary, dispensary, or any other name under which our institution is conducted, appears to me to be a question of little moment, so long as it continues to carry out the objects of its benevolent supporters, and so long as its medical officers, as they have hitherto done, sedulously abstain from representing the Metropolitan Free Hospital as more than it really is.

Besides thus affording immediate relief to the poor sufferer laboring under disease, by establishing an institution of this kind, the governors have also had in view the instruction of those who intend to make medicine their profession, and with their usual liberality have permitted the practice of its medical and surgical officers to be witnessed and participated in by pupils; and for many years the practice of the Metropolitan Free Hospital has been recognised by the Worshipful Company of Apothecaries, and the military and naval medical boards. The cases which present themselves to us are not those which are designated, and too often absurdly so, “capital cases;” neither are they cases of “great rarity.” It is occasionally our lot, in common with the other medical charities of this metropolis, to admit cases which are not to be met with in everyday practice, but the majority is constituted of those which every medical practitioner should be acquainted with, and which, I am sorry to say, are sometimes heedlessly passed over by the student in medicine, who often imagines they are not worth attending to.

It cannot be too frequently impressed, however, upon the student's mind, that diseases the most trifling in their nature merit his minutest attention, and that in his after practice he will find patients to be just as anxious to get rid of a comparatively uninteresting affection, as of one, which from its rarity or some other cause, he might think the reverse. Besides, it is for the cure of less urgent cases that the young practitioner is especially called upon to act; and it is unnecessary for me here to mention the many instances I could adduce of the highest advancement being the attendant of such services. Your attention, therefore, in these lectures will be principally directed to the nature and treatment of those cases which are certain to fall to your lot to deal with in your after practice; and whenever any infrequent cases of disease present

themselves, these also shall receive at our hands all the attention they are deserving of.

That our means of practical instruction in the Metropolitan Free Hospital are very great, cannot but be admitted upon all hands, when I mention to you that no less than 42,049 patients have been treated by the medical officers within the short period of six years—“a number,” as the report of our committee justly remarks, “which has not been exceeded, and which they believe has not been equalled, in the same space of time by any similar charity in Great Britain.”

It is not unimportant to state to you the arrangements the medical officers observe in their attendance, and the manner in which the cases are seen and recorded. At the foundation of the institution six medical officers were appointed, besides a resident apothecary; vacancies have occurred since that time, and each was anxiously sought after as it took place; so that the medical staff has always been efficiently and respectably filled. Of the medical officers, three are physicians and three are surgeons. The former must be licentiates of the College of Physicians in London, and the latter must be members of the College of Surgeons in London. Every day, except Sundays, a physician and surgeon are in attendance at one o'clock, and the resident medical officer is always upon the spot to give his immediate assistance when required. In cases demanding consultation, all the medical officers are summoned; you thus see that the same attendance and medical etiquette are observed in this institution as in the largest hospital in London. As each case presents itself, the age, residence, and disease of the patient are recorded in a folio kept for that purpose, and to which you can always have access should you desire at any time to refer to it. Notwithstanding that our committee of management has scrupulously abstained from appropriating any part of the building fund from its legitimate object, yet it has sanctioned the admission of cases, as in-door patients, when the nature of their diseases was a subject of interest to the medical or surgical officers; and although the expenses attending the admission of such were borne in the first instance by the medical officers under whose care they were received, yet the money was always refunded to them by the committee.

Amongst the in-door surgical patients, the one which certainly excited the greatest interest amongst the profession was that of Thomas Young, whose case at the time was faithfully and fully reported in the Provincial Medical and Surgical Journal. He was grievously afflicted with stutter, and presented every hope of being relieved, if not cured, of his infirmity by the application of an operation somewhat formidable, but which came strongly recommended by Professor Dieffenbach, who published the history and results of some cases in which he stated he had been eminently successful. These cases were submitted after their cure to several medical men, and an account of them was laid before the Royal Academy of Medicine, Paris, in a memoir by Professor Dieffenbach himself. The professor's memoir, besides being published in the pages of the Provincial Medical and Surgical Journal, also underwent translation by Mr. Travers, and was published by him in the form of a pamphlet, with plates and full directions how to perform the operation. I have been informed that

Mr. Travers saw the cases, and that at the time of his pamphlet being published, he was not in this country. Professor Dieffenbach having been already well known to the British public, for his ability as a surgeon and his boldness in the operative department of medicine, in both which characters he had already gained so much deserved reputation for his cure of squint by the section of muscles, was justly entitled to receive credit for the success which he stated to have attended his new operation for stammer; and, acting upon the professor's representation, together with the collateral evidence of the happy results of the cases which I have mentioned, I did not hesitate to perform the operation in the case of the man now before you. I removed a wedge-shaped portion of his tongue, having guarded against any formidable hæmorrhage during the time the divided portions of the tongue were being brought together, by inserting curved needles (manufactured by Weiss) previously to making the section of the organ. For some time after the operation this patient held out the most sanguine hopes of cure. The poor fellow lay in bed, unable, from the condition of his tongue, to take any but the most fluid nourishment. When asked at this time to pronounce certain words, he did so *slowly*, but without impediment. This state lasted until the ligatures were removed, when he again found an impediment to his utterance, and gradually relapsed into his former condition, and now, as you can test for yourselves, he suffers under a painful stutter. The cicatrix in the dorsum of the tongue is very visible, and also on its sides, marking the depth to which the incision extended. Before Young was operated upon, several medical gentlemen besides my colleagues saw him, and coincided in the opinion that it was just the case to test the utility of the operation recommended. Although he suffers very much at present, yet he certainly is not so bad as he was when he left the hospital; but I do not attribute this improvement to the effects of the operation. He has told us himself that he can speak more fluently, but that he can do so much better at one time than another, which variable condition must certainly depend upon causes over which operative surgery cannot effect control. He is, moreover, in much better health and condition than when I saw him last.

In this institution, also, some of the first operations for the cure of strabismus were performed, and several of the cases which I have published in my treatise upon that deformity were seen here by many of the profession, so that at the Metropolitan Free Hospital the two operations which have excited more interest, and created more fuss in operative surgery than has occurred for the last ten or twelve years, were performed, their real merits and utility tested, and their results made known to the profession. Besides the operation recommended by Professor Dieffenbach for the cure of stammer, I have also performed here the milder ones, from excision of the uvula to division of the genio-hyo-glossi-muscles, and it would be to suppress the truth did I not state to you that in numerous cases of hesitation in speech I have witnessed the happiest results from the removal of a part or the entire of the uvula, of the tonsils, and occasionally of all three. The indiscriminate application of one method of treatment to every disease tends to bring

the remedy into disrepute, from the failures which must necessarily be the result; and lately it has been common to hear of modern surgery being rampant in its spirit, of mutilated throats laid to its charge, and of the substitution of fixed bull's eyes for squinting ones. All this may be very true, and very likely is attributable to want of mature reflection before undertaking an operation for either squint or stammer. I have seen mutilated throats without the impediments of the patients operated upon being removed, and also frightfully disfigured eyes from the division of the recti muscles; but because such have occurred, it surely does not follow that those who are less rampant with the knife should lay aside operations which, when conducted with caution and discrimination, are certain to lead to beneficial results. So long as I do not inflict a permanent injury by the removal of an enlarged or an elongated uvula, and enlarged or too projecting tonsils, or do not injure or disfigure the eyes by the section of their muscles, I shall continue to perform these operations in cases which hold out a fair and reasonable hope of happy results. No later than last week I removed more than half the uvula from a stammering patient, and with every hope of a successful issue. The case was simply this: he suffered when a boy from repeated attacks of "quincy," to use his own expression; whether the hesitation in his speech was previous to these attacks, he could not tell. His uvula rested upon the dorsum of his tongue, even in inspiration, when it is almost always contracted, in some cases even to disappearance. It was carried forwards, and moved to and fro without leaving the tongue. He had no cough, as is often the case when the uvula is elongated; and the absence of this symptom I attribute to the parts being accustomed for many years to the unnatural condition of the uvula. On removing the elongated part, he spoke much more fluently, and a day or two ago I received a letter from him, saying, "I am much better, and my friends say I am much improved in my speech." I am not prepared to say that patients suffering under hesitation in speech, without their tonsils or uvula being enlarged, will be benefitted by their removal, because I never attempted such operations; but this I can testify to, that the removal of an elongated uvula, of enlarged tonsils, or of all three, in patients who stuttered or hesitated in their speech, has been attended in my hands, as well as in the hands of others, with a success sufficient to warrant a repetition of similar operations in similar cases; and during your attendance upon this course of lectures you shall be afforded many opportunities of judging for yourselves.

Gentlemen, within the last six years the number of cases admitted to the benefit of the Metropolitan Free Hospital has been 42,049. Of these, about two-thirds were under the care of the physicians, and one-third under the care of the surgeons. Out of the number of surgical cases, there were 3,695 afflicted with diseases of the genito-urinary organs, exclusive of those of the kidneys—thus forming something more than one-fourth of all the surgical cases. Since I have made this calculation, I find that the diseases of these organs bear fully the same ratio, if not more, to the surgical cases applying for relief; and as I am thus furnished with numerous practical illustrations of these interesting and important diseases, I shall confine my ob-

servations this session to their nature and treatment.

At our next meeting, which will be this day fortnight, I shall lay before you a classification which I have drawn up, of the 3,395 cases which have been admitted during the six years I have mentioned, and shall then direct your attention to the nature and treatment of urethral discharges, of which we shall in the interim doubtlessly be furnished with some forty or fifty new cases to illustrate the remarks I purpose to make upon their nature and treatment. Before we separate, Gentlemen, there are a few cases of interest which have undergone operations, and which are still in attendance.

The first is a case of varicocele, in which I removed more than one half the corresponding hemisphere of the scrotum. This operation was recommended very strongly by the late Sir Astley Cooper. In this man's case, many circumstances contributed to demand the operation. He had been the subject of the disease for four or five years; it supervened on an attack of hernia humoralis, and he suffered excruciating agony when the testicle was permitted to hang unsupported for any length of time. He constantly wore a suspensory elastic bag, but it did not afford him more than temporary relief, and after taking exercise, notwithstanding he had the artificial support, he suffered greatly, and, as is generally the case, the disease is on the left side. He is now capable of taking his usual exercise without inconvenience. The cicatrix of the wound is, as you perceive, not more than an inch, although the wound itself was at least three inches, and required six stitches of uninterrupted suture to bring its edges together. The varicose condition of the veins still exists, but from the support now constantly applied, the drag of the testicle being taken off, it is probable that healthy changes in the varicose vessels may supervene.

ENCYSTED HYDROCELE OF THE CHORD.

This patient applied some time ago with an encysted hydrocele of the spermatic chord. It was the size of a walnut, and situated just above the testicle, so that the tumor could be insulated. It had the appearance of a third testicle. I evacuated the fluid in the first instance by a single puncture of a common sewing-needle; the fluid escaped into the cellular tissue, and thence was absorbed, the entire disappearing in two hours. The tumor returned again in the course of a few days, as large as ever. I repeated the same operation with the same results, and at last I evacuated the tumor by a small trochar, received its contents into an elastic syringe, and injected back the fluid. By these means a sufficient degree of inflammation was excited within the tumor, and after the usual changes which take place in such instances, it totally disappeared.

STRABISMUS.

This girl was the subject of divergent squint; when I divided the external muscle of the left eye, that affected, it became straight and *prominent*; indeed, so prominent was it immediately after the division of the muscle, that all who were present were struck with the difference between both eyes. Now you perceive the eye has lost all unnatural fulness, and so successful has been the operation, that it is impossible to detect which eye had been operated upon. This is

an interesting case in the history of strabismus, and on this account I have made these few observations respecting it.

In conclusion, Gentlemen, permit me to say that it will always afford me the greatest pleasure to meet at these lectures any of my former pupils, as well as those now in attendance upon my anatomical and physiological lectures at the Westminster Hospital School of Medicine.

ACADEMY OF SCIENCES, PARIS.

November 28, 1842.

NEUTRAL AZOTISED PRINCIPLES OF ORGANIC BODIES.

M. Dumas read a memoir on this subject, in his own name and that of M. Cahours.

Chemists have long since pointed out the existence in animals of the neutral azotised substances. These are albumen, fibrine, and caseine. In a memoir presented to the academy, eighteen months ago, by MM. Dumas and Boussingault, the authors showed that albumen, fibrine, and caseine exist in plants; that these substances pass ready formed into herbivorous, and from the latter into carnivorous animals; and finally, that plants alone furnish the three substances just named. The same principle was extended to fatty substances, which, according to the authors, are essentially derived from the vegetable kingdom, and, passing into animals, contribute to combustion. The authors likewise pointed out the necessity of grouping together all organic substances which have the property of being converted by fermentation into lactic acid, and which, like sugar and fecula, are important ingredients in the process of nutrition, while they are mere products of vegetable life.

These views and their results are comprised in the following table:—

THE VEGETABLE	THE ANIMAL
<i>Produces</i> neutral azotised substances,	<i>Consumes</i> neutral azotised substances,
“ fatty substances,	“ fatty substances,
“ sugar, fecula, gums.	“ sugar, fecula, gums.
<i>Decomposes</i> carbonic acid,	<i>Produces</i> carbonic acid,
“ water,	“ water,
“ ammoniacal salts.	“ ammoniacal salts,
<i>Disengages</i> oxygen.	“ oxygen.
<i>Absorbs</i> heat,	<i>Produces</i> heat,
“ the electric fluid.	“ the electric fluid.
Is an apparatus of <i>reduction</i> .	Is an apparatus of <i>oxidation</i> .
Is <i>immovable</i> .	Is <i>locomotive</i> .

The granivorous bird finds all the elements of its nutrition in corn. The dog procures from bread every thing necessary for its support and development. The mare find in oats and barley not only what is requisite for nutrition, but the caseine which exists in her milk. All kinds of grain, therefore, independently of the starchy or saccharine principles which they contain, must likewise furnish to animals the neutral azotised principles which they contain, but which they are incapable of creating. This is proved to be the case by analytic chemistry. In cases where starch, dextrine, and sugar, disappear from the alimentary substance, they are replaced by fatty substances, as we see occur in the nutrition of carnivorous animals; and we find that nearly the whole of the aliment of herbivorous animals is formed by an association of the

neutral azotised principles with fatty, saccharine, or farinaceous substances.

Does it not then follow from these two facts—

1. That the neutral azotised principles or organic bodies are indispensable elements in the nutrition of animals, and—

2. That animals can, to a certain extent, do without fatty substances, and absolutely without farinaceous or saccharine substances, provided the former be replaced by equivalent proportions of sugar and fecula, and *vice versa*?

But although the abstinence from fatty substances may not compromise animal life, it exercises an influence on it which merits our attention. That animals are incapable of generating the neutral azotised principles is shown by the fact of their being compelled to seek the latter in their food; but to show this more clearly, we should follow those principles from their introduction into the stomach to their final destination.

Now it is easy to prove that the neutral principles alluded to are essentially represented by the urea of man and herbivorous animals, and by the uric acid of birds and reptiles. Without taking into account the excrements, each adult human being absorbs daily a quantity of neutral azotised principles equivalent to from 3.86 to 4 drachms of nitrogen, a quantity, the whole of which is found in the 7 or 8 drachms of urea contained in the urine passed by him during the course of twenty-four hours. Is it not, then, natural to conclude that the neutral azotised principle of our food gives origin to this urea, and that the whole effort of our organisation is directed towards assimilating this neutral principle, when required, or converting it into urea?

This theory is rendered almost certain, when we reflect that fatty substances disappear from our organisation by a process of combustion; that amylaceous and saccharine substances are also removed by combustion; and, finally, that the difference between the urea and the neutral principle from which it is derived is accurately represented by a change taking place during combustion.

The essential albumenoid principles—viz., albumen, fibrine, caseine, and legumine, form the chief azotised element in the nutrition of man and animals. It is probable that they are the only principles endowed with the property of undergoing combustion in the blood to be converted into urea, and of being fixed in our tissues by the processes of assimilation. It is doubtful whether gelatine possesses these properties; and hence, if in any alimentary substance (not containing gelatine), we can determine the exact proportion of albumen, fibrine, or legumine, we obtain its exact value as a means of fulfilling the requisites of assimilation. By eating and digesting these substances we form muscular and other tissues, and preserve them from the deleterious changes which must be produced by blood too poor in fibrine or albumen.

This is so clear that it is impossible to name a single nutritious substance, adopted by man or the higher animals, which does not contain in abundance one of the four azotised principles alluded to; and hence it follows that the quantity of nitrogen contained in food gives the value of the article as a nutriment, the azotised principle being the one which

is essentially assimilable, and constitutes the framework of organised bodies.*

Knowing by experience that an adult, for example, consumes from 26 to 31 drachms of dry albumenoid matter, representing 2.53 to 5 drachms of nitrogen, we can draw up a table of nutritive equivalents, considered in relation to assimilation. The nourishment of man, in a standard condition of health, contains 103 to 129 drachms of fresh azotised matter, representing 26 to 34 drachms of dry azotised matter, equivalent to 4 or 5 drachms of nitrogen. As nearly the whole of this azotised matter is contained in the venous system, under the form of urea, it remains to inquire what urea is, and how it differs from the azotised principle from which it has been derived. Now the beautiful experiments of Wöhler show that urea may be produced by a modification of the cyanate of ammonia, which latter is formed by an oxide of cyanogen and an oxide of ammonium. Hence an animal produces four oxides—viz., carbonic acid, cyanic acid, and an oxide of ammonium. The two latter, combined and modified, produce urea; and in our view, urea is formed from the azotised principles by combustion. With the assistance of a formula (the only object of which is to enable us to calculate the quantity of heat disengaged during this conversion), we find that the quantity of azotised principle daily converted by man into urea, presents about 13 drachms of carbon and 93 grains of nitrogen, as combustible matter to the respiratory process. But these can produce only 575,000 units of heat; while from the quantity of oxygen consumed, and of carbonic acid produced, each man must produce daily from 2,500,000 to 3,000,000 units of caloric. Hence man must derive from other aliments about 52 drachms of carbon and 155 grains of hydrogen to complete the proportion of caloric necessary to his existence. This necessity is an extremely pressing one, for death from cold is inevitable, after three hours' suspension of the action of our calorific apparatus.

From the preceding observations, it follows that it is indispensable to furnish the adult daily with a quantity of food, containing from 26 to 31 drachms of dry azotised matter, because nothing can prevent his blood from losing daily from 26 to 31 drachms of the same matter through respiration and the combustion consequent on that process. As the blood contains albumen, so it consumes albumen, and we must furnish the blood with that principle, or it will attack the sources of life, by appropriating the albumen of those tissues which are indispensable to existence.

CROYDON INFIRMARY.

[Practice of G. Bottomley, Esq., Surgeon.]

MALIGNANT DISEASE OF THE ANTERIOR MEDIASTINUM.

Jesse Briant, aged twenty-one, a day laborer, of a strumous constitution, has from his infancy been continually subject to colds and tightness of the chest. He had not had any very serious indisposition until about seven months before his death, when he was seized with an unusual craving for food, which con-

* If this view be correct, food is to man what dung is to the earth—it merely manures him; and hence may be derived a new formula for invitations to dinner.—Ed.

tinued about a week, and ended in an attack of hæmatemesis, when he vomited up more than a pint of dark colored blood. From that period his appetite decreased, and came again at intervals. He could eat a fair quantity of food, but invariably the stomach rejected the ingesta an hour after meals. He never had any color, but his face latterly assumed a very sallow aspect. He wasted away much, until œdema of the lower extremities supervened, and also of the face and eyelids. The bowels were regular, but he could scarcely get any sleep at night; he was continually subject to night sweats. He had frequent attacks of epistaxis, occurring always at night, and difficult to suppress. The eyes were bloodshot, and had been so since the hæmatemesis. For these symptoms he had been attended at home during five months, but gradually getting worse, he applied to enter into the infirmary on the 18th of October, 1842.

On admission he presented the following appearances:—Countenance sallow, and of a malignant aspect; extensive chemosis; œdema of the eyelids; respiration hurried; tongue coated; pulse 120, full, and and not compressible; frequent cough; expectoration bronchitic, occasionally tinged with blood.

The stethoscopic signs were dulness on percussion over the whole chest, but rather less at the apex; nearly total absence of vesicular murmur; bronchial respiration heard over the greater extent of the thoracic cavity; increased resonance of voice, amounting to bronchophony. The action of the heart was heard over a great extent of surface, but not increased in impetus; no bruit could be detected. The dyspnoea was constant, and also œdema of the eyelids; the appetite not much impaired, but very capricious. The patient was bled to twenty ounces, and he took tincture of digitalis with antimonial wine and saline medicines regularly, but these means failed to reduce the pulse, which remained from 120 to 130 until his death. Counter-irritation was applied to the chest, which relieved the urgent symptoms.

He went on for nearly a month, his state not varying much, and at intervals he expressed himself nearly well enough to leave the house; but on the 15th of November he had a violent attack of epistaxis, which, for twenty-four hours, resisted all the usual remedies; during that time he lost from three to four pints of blood, including twelve ounces taken from him. The respiration became more hurried; pulse 130, feeble, and thready; cold clammy sweats came on, and he never rallied, but expired at eight, p.m., 17th of November.

Post-mortem Appearances, Sixty Hours after Death.

On taking off the sternum, &c., it was found to adhere closely to the pericardium, through the medium of a hard, whitish, cartilaginous substance, filling entirely the anterior mediastinum, and forming a complete bond of union between the anterior walls of the chest and the pericardium. Its greatest thickness was two inches in the middle, diminishing gradually towards the sides, and in extent about the size of the open hand. The pericardium was more than twice the natural size, extending far over to the right side of the chest, and contained about a quart of light yellow serum. Heart of a natural size, presenting externally no abnormal appearances. The lungs were healthy; no traces of tubercles, which, from the physical

signs, had been suspected during life; there were slight traces of recent inflammation of the left pleura, which contained a pint of serum. The liver was enlarged, and presented the nutmeg appearance; the gall-bladder was much distended. On cutting through the œsophagus, pus escaped, which led to an examination of the stomach; this viscus contained about two ounces of a greenish yellow pus, and upon being washed, a large ulcer of apparently long standing was found to exist, covering about two square inches of the cardiac extremity. The pylorus was not diseased; the intestines appeared healthy. The spleen was double the ordinary size, and much congested. No other organ was examined.

P.S. The preparation was sent to Guy's Hospital, and is to be put up in the museum.

PHYSIOLOGY OF THE NERVOUS SYSTEM.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In addressing to you the following brief remarks, I make an effort to stem the torrent of narrow and illiberal feeling which appears to pervade the medical profession. In your notice respecting the proceedings of the Royal Medical and Chirurgical Society, you “regret extremely that the society should have lent itself to a proceeding so unworthy of its dignity and reputation.” And what is that proceeding? The reading of a paper presented to the attention of a society by two gentlemen, containing an account of a case of “amputation of the thigh, alleged to have been performed during Mesmeric sleep.” Are medical men to forget that they belong to a royal association? Are the courtesies of life between gentleman and gentleman to be lost sight of, when folks step within the limits of a medical circle? Are surgeons who are esquires, and barristers who hold an equal rank, to be flouted by the insinuation of falsehood, because they dare to relate facts which militate against the narrow prejudices of would-be philosophers? Do you know, Gentlemen, what impression the expressions you have used make upon impartial men that belong not to our profession?

I happen to be no “advocate of the delusion,” as you please to term it, of Mesmerism. I ought with shame to say that I have derided, perhaps with much want of courtesy, the accounts I have heard of the wonders of animal magnetism. I have seen enough to know that I was wrong—that there are connected with the subject facts which demand inquiry; and inquiry they must have, whether you like it or not. I tell you, Gentlemen, and all who oppose the investigation of truth, that time marches past you, and that the world will not wait until it suits the high mightiness of doctor bodies to lay aside their paltry feelings. Men of small minds will be pitied, and men of moral courage will not shrink from inquiry because the objects of their pity may presume to bow-wow at them.

I may tell you that I know very little of Mesmerism. I have seen people put into a state of catalepsy; I have seen people in a state of somnambulism, in which phenomena were exhibited that most assuredly deserve further investigation. I am convinced that sensibility

is suspended in some of the states I have witnessed; to what extent is a question—but questions are not to be asked, because, forsooth, it may displease some don in the profession of doctor bodies. I am told that all the phenomena I have witnessed are but modifications of *hysteria*. Be it so. What is *hysteria*? How is it allied to epilepsy? How is epilepsy so nearly allied to sleep? What relations are there between these and catalepsy? Can sleep—can catalepsy be produced artificially? If so, in what number of individuals out of every hundred? Is the cataleptic state injurious to the individual submitted to it? Assertions differ on this point. In many cases, the patients and their friends have declared to me that not only no injury has taken place, but that great benefits have accrued to health in consequence of repeated conditions of catalepsy. If this be so, depend on it, Gentlemen, that your veto directed in sneers against inquiry will have very little effect in checking the progress of our knowledge. I have myself been ridiculed for announcing *truths*. Time—time has rolled over my head, and has convinced unwilling men that the old adage of “*Magna est veritas et prævalebit*” is not so idle a maxim to depend upon. The curious fact relating to Mesmerism seems to be the obstinate feeling against all investigation which characterises the medical profession upon the subject.

I am, Gentlemen,

Yours, &c.,

JOHN ASHBURNER.

55, Wimpole-street,
Dec. 5, 1842.

CONTRIBUTIONS TO A KNOWLEDGE OF GREEK AND TURKISH REMEDIES.

By X. LANDERER, of Athens.

Peculiar Exanthema, and its Cure.—In some parts of Greece, but especially in the neighbourhood of Thermopylæ, about Libadia, a peculiar exanthematic disease prevails, which attacks both the young and old, more particularly females than men, and the symptoms of which are hoarseness, peculiar condylomata forming on the glands of the neck, and afterwards on the genitals, moist exanthemata, tormenting the invalid, especially during the night, by their violent itching. This disease seems to rank between lepra and syphilis, and is probably generated by both of them. The most talented physicians of Greece have tried various curative means against this complaint, but with indifferent success; probably arising from the circumstance that their patients did not pursue the proper medical treatment laid down, either from want of patience, or on account of their limited means. Some time since a surgeon presented a petition to the royal ministry, asking permission to be allowed to occupy himself exclusively with the cure of this disease; and in proof of his competency to treat the same, produced, before a medical commission, several patients whom he had perfectly cured.

This mode of treatment consisted chiefly in the internal and external application of mercury with chalk, and some beverages tending to produce perspiration, which were prepared from the *smilax aspera*.

Hyoscyamus Albus, for *Toothache*.—In some parts of the Greek continent, the stalks of *hyoscyamus albus* are used for toothache. They are dried, and employed in lieu of tobacco for smoking. [In England the seeds are occasionally employed for the same purpose with useful effect.—Ed.]

Plumbago Europæa, for *Issues*.—The *plumbago Europæa* is frequently found in Rumilia, and in marshy places. Its roots are so acrid that they are used for causing issues, and even as a vesicant. If the more tender surfaces of the body are rubbed with the fresh root, the skin will be reddened in a few moments; and if the root is allowed to remain for a short time, it will be soon covered with small blisters.

Styptic.—As a styptic, roasted coffee, with vinegar, is held in high esteem. By the application of this remedy I have seen violent hæmorrhage quickly arrested.—*Annals of Chymistry*, No. 8.

OBITUARY.

We regret to announce the death of Daniel Cooper, Esq., F.L.S., editor of the “*Microscopic Journal*.”

PROMOTIONS AND APPOINTMENTS.

War-office, December 2.

27th Foot—William Nelson Irwin, gent., to be assistant-surgeon, vice Grant, appointed to the 28th foot.

28th—Assistant-surgeon James Grant, M.D., from the 27th, to be assistant-surgeon, vice Macdonell, promoted in the 80th.

80th—Assistant-surgeon Alexander S. Macdonell, from the 28th, to be surgeon, vice Turnbull, deceased.

91st—William Stewart, M.D., to be assistant-surgeon, vice M'Laren, deceased.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, December 2, 1842.

J. O'Hea, T. Morgan, D. M. Aitken, J. Dwyre, J. G. Rusher, H. B. L. Brock, T. Bishop, G. Tweddell, C. J. Farr, G. E. McLaughlin, J. R. King, J. H. Gramshaw.

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COURSE OF CLINICAL LECTURES, DELIVERED AT THE MIDDLESEX HOSPITAL. BY DR. WATSON.

Lecture VIII.—December 3, 1842.

GENTLEMEN,—I have not very many observations to address to you on the present occasion; our meeting of this day must, therefore, be more than usually brief. There have been no deaths among my patients during the past week; I have, therefore, no morbid specimen to submit to you. Neither have there been any fresh admissions, I believe, since last we met, while as regards those patients taken in during the preceding week, I then cursorily noticed them, or at least mentioned their names and ailments in a rough way.

Among those enumerated on that occasion, you may remember one, concerning whom I remarked that I did not then accurately know what her disease was. That patient was Sarah Chambers, aged fifty-three, whose symptoms and history led me to suppose that she had some uterine disease, and of that belief I wished further confirmation. The symptoms of which I speak were pains in the loins extending down the hips and thighs, a sensation of "bearing down," and some vaginal discharge. Dr. Ashburner has since, at my request, investigated the condition of the womb; and he reports that the os and cervix uteri are hard, and in a state of commencing ulceration; that the case is, in fact, a case of cancer of the womb. This is the third example of cancer occurring among my patients since the session began in October last. The first, which presented itself for observation in the early part of the session, was, you recollect, a case of cancer, or scirrhus of the stomach; the second, spoken of last Saturday, was scirrhus of the rectum; and in this third instance we have another organ involved in this frightful and hopeless malady.

When cancer is limited to the os uteri, that part is sometimes amputated. I suspect that among our continental neighbours, the French, with whom the operation is frequent, such amputation has been sometimes performed in cases where there was no real, no true carcinoma at all. This is, however, a subject with which I am not familiar, and which more properly falls under the observation of others. In the present case nothing could be done but to prescribe palliatives, and principally opium, to assuage the pain. The patient was not a fit object of this charity, her disease being beyond hope of cure; and she has gone to reside for the remainder of her life, which must be short, and I fear will be a period of intense suffering, with her daughter in the country.

You remember my having mentioned last day, Jane Stoker, a girl who had erythema nodosum. Under

the treatment adopted, which was principally rest, she has rapidly recovered, and is now quite well, and has either left, or is about immediately to leave, the house.

In the hospital there are, among my patients, two instances of scarlet fever. Both of them have been mentioned before; but in each there are one or two points deserving a passing notice from us now. In neither case has the disease been very severe, nor very slight.

Hester Green, whose name is in your recollection as a patient admitted for another malady, contracted the disease of scarlet fever in the hospital. I was not aware, on her admission to the ward, that she had not had it previously, nor that the immediately adjacent bed to hers was tenanted by a patient affected with that disease. In our hospital, diseases that are confessedly communicable do not often spread from one patient to another; and this, in my opinion, is to be ascribed to the constant care that is taken to promote cleanliness and ventilation—to the uniform supply of good air, and the instant removal of everything that could engender the slightest offensiveness or foulness in the wards. The accident in this case of Hester Green proves one interesting point; it shows you that the incubation of scarlet fever—the period that elapses between the reception of the specific poison and the development of the specific disease—the period of the brooding or hatching, as the expression implies—is shorter than in some of the maladies that belong to the same class. This woman entered the ward about one o'clock in the afternoon of the 22nd of November. She began to feel sore throat, which is in most cases the first symptom of the disease, on the evening of the 26th. Supposing—what is scarcely probable—that an effective dose of the contagious poison was imbibed at once, upon her arrival or entrance into the ward, it lay dormant in her system four days and a few hours—a short period, as compared with the incubation of some of the kindred maladies. The length of interval between the receipt of the poison and its full development is from ten to fourteen days in measles, and from fourteen to sixteen, or eighteen, in small-pox. Here the interval was, at the most, about four days and a half; and this is consistent with what I have noticed before, and with the observations of writers on the disorder.

The complaint in Hester Green was very distinctly marked. I did not see the patient on the 27th; but on the 28th the surface of the skin presented a sufficiently vivid rash, of a bright lobster color, having all the characteristics of the efflorescence of scarlatina. On the second day of the disorder the tongue was somewhat furred and foul, but has since become quite clean and very red, almost raw-looking, like a strawberry. There was so much swelling of her tonsils that Mr. Corfe was induced to puncture one of them, which little operation gave her consider-

able relief. The disorder has run its course steadily, but favorably. She has had no delirium or head symptoms; her pulse has been quick and weak. I prescribed at first carbonate of ammonia, and afterwards gave her some wine. The fever seems to have cured, at least it has suspended, the gastrodynia, under which she had labored, and for which she was admitted. That affection may, as I said on last Saturday, have depended on gall-stones, or it may have been a consequence of dyspepsia. At all events it has disappeared; let us hope, never to return.

Authors of treatises on the subject make three distinctions or species of scarlet fever, and such distinctions we find in actual practice. There is, first, the *scarlatina simplex*, scarcely meriting the important designation of a disease, in which the affection of the throat is slight and without ulceration, and which is so little of a disease that it requires nothing more than prudence and the adoption of the antiphlogistic regimen. Then there is the *scarlatina anginosa*, in which the throat is more severely affected, being ulcerated, and the eruption is florid and persistent. And lastly, there is the *scarlatina maligna*, in which the skin is capriciously affected, the eruption mostly livid and coming and going, and the throat is often in a dreadful state of inflammation, and even sloughing.

Scarlatina maligna is undoubtedly a very fatal malady. Sometimes it proves so by the overwhelming force of the influence of the poison, in the first instance, on the nervous system; the rash never comes out fairly, but is partial or livid; the skin becomes cold, the pulse sinks, the brain becomes confused and oppressed, and death follows in a few hours. But when this first burst of the disease is sustained, and the system has borne up against the assault, a new danger often arises from the state of the throat, which reinfects and poisons the blood, sending forth a poison that irritates the larynx, the stomach, and the alimentary canal, and gives rise to diarrhoea, to scalding and excoriation of the anus, and, on the other hand, to an acid discharge from the nostrils, fretting and galling the upper lip, and often to immense swelling of the parotid and salivary glands, and of the cellular tissue around them. I had a patient in King-street, Holborn, a child, who had had this malignant species of scarlet fever; arrow-root, when swallowed by him, ran out at his ear. The child died, and it was manifest that the poison proceeding from the ulcerated throat had led to the destruction of the organs connecting the throat and ear. I mention this very formidable set of symptoms, because I have reason to believe that they may often be prevented by attacking the secondary source of all this mischief in the throat. You might have observed that I prescribed for Hester Green a gargle of chlorine. In very bad cases of malignant scarlatina I should recommend a solution of chlorine to be swallowed. I have heard from various quarters the most encouraging assurances of its efficacy, which, I presume, is a consequence of its neutralising the secondary poison. I have, fortunately, had but few opportunities of trying this remedy, for I have had but very few patients affected with the malignant form of the disease; but it is a thing worth remembering in our treatment of this frightful and formidable distemper.

The other case, that of Fanny Barr, has also been

an instance of scarlatina anginosa; and from it, also, though not a very uncommon case, we may pick out a few crumbs of instruction. She was admitted on the 3rd of November, with the eruption fully out upon her. By the 8th the redness was gone, even that of the tonsils had nearly disappeared; she had no sore throat remaining, and her cuticle was desquamating. Two or three days afterwards she had a return of feverishness, and I began to fear, what is a very common sequela of this disease, that she was about to have inflammatory, or what is called acute dropsy, or at any rate some affection of the kidney, such as often lays the foundation of Bright's kidney; but the examination of the urine did not support that suspicion. I have no doubt now that at this time another local affection was commencing, also common enough in such cases, but which was not at first detected. She soon professed herself to be comfortable again, and I was about, at her own urgent request, to allow her to go home, though somewhat reluctantly. Reluctantly, I say, because I have a rule in this respect which I think good, and which I never like to transgress, and that is not to permit a patient to go into the open air for at least a month from the first outbreak of scarlet fever. After that time the risk of the consecutive dropsy, the granular kidney, and other diseases, is over. From the observations of Dr. Wells, this disease of the kidney has never appeared as a sequela of scarlet fever later than the 23rd day after the outbreak of that disease; if, then, we extend the period from the 23rd to the 28th day, I think we shall have used ample precaution. The reason why renal disease is likely to follow scarlet fever, when proper precautions are not adopted, is most probably this—that the cuticle having peeled off, the new skin is unable to bear the cold, and thereby incapacitated for the performance of its functions, and thus undue weight and overwork devolve on the kidney which performs functions analogous to those of the skin. I remember the case of a person, a namesake of my own, the son of a master chimneysweeper, residing in Portland-street, who had had scarlet fever, and in his convalescence thought it no harm to go out to his father's stable, supposing that no harm could arise from going into a place warmed by the horses. But the consequence of his passing even through the short open space from the dwelling-house to the stable had nearly proved fatal; he was thrown into convulsions, and only by prompt remedies was he restored. I adopted the necessary treatment, and I have very recently seen him in all appearance a healthy young man. However, I have advised him to caution during his life, for we cannot be assured that no bad effects remain undeveloped in his system. It has been observed that those consecutive diseases generally follow the slighter attacks of the scarlatina. I would attempt to account for the latter fact thus: patients who have had scarlet fever very severely cannot go out, however desirous they may be, into the open air so soon as the others who have had but slight attacks, and before they are able to go out the new skin has acquired sufficient strength to repel cold and to perform all its ordinary functions. These latter remarks bear not much affinity to the case we have had under consideration, but having suggested themselves, *en passant*, they may be not un-

worthily our recollection. To return to Fanny Barr ; she was anxious to resume her domestic duties, probably through fear of losing her employment, and she had nearly persuaded me to give my permission for her departure. But, on trying to leave, she said she could not straighten her right arm. She had not complained of this arm, but I found that the elbow was flexed, and that neither could she extend it herself nor suffer me to do so. I got Mr. Arnott to see it, and he found unequivocal indications of inflammation of the joint, with effusion into its cavity, and thickening of the tissues thereabout. This is a result not at all uncommon—that is, scrofulous inflammation of the glands, or joints, after all those blood diseases—proceeding, as it were, from the dregs of the disease. I said in the commencement that those cases did not furnish any uncommon features, but they may not have proved useless in affording to us these few practical remarks.

To one other case we may devote a passing notice. The boy, Henry Field, aged thirteen, presents a case of chorea, it itself affording to us nothing very remarkable. The boy has lost the power of controlling the motions of his whole right side ; the arms and legs on that side, and even the head, are subject to almost constant motion ; his speech, too, is very considerably affected. This has been of seven or eight years' duration. His mother and himself state that he had headache, and that he was cupped and leeched for it. His mother states that there is no jactitation while he sleeps. I believe that is the ordinary rule, and the cause is, that the influence of the sensorium is at rest during sleep. Chorea is a strange disease, but generally it is not a perilous one. It is in most instances a disease of youth, and among youth belongs to girls more than to boys, among boys to those of the weaker and almost effeminate constitution, and to children of dark hair and complexion more than to those of fair hair and complexion. It appears to be some disordered function of the spinal chord over which the control of the will is not perfect, but against that control the involuntary movements show a rebellion. It would seem that when the will is put forth, the chord is partly controlled, but in part acts independently, and those extraordinary vibrations and jactitations are thus produced. In most cases there is no organic disease of the chord ; the instrument is not broken anywhere, but is sadly out of tune ; and, if we may follow up the metaphor, we often effect a cure by bracing it up again. Chorea may be said to originate in causes where the mind is involved ; it arises frequently from sudden excitement, fright, serious alarm. Hence we deduce the propriety of giving those medicines that impart a healthy and firm tone to the mind—such as steel. Purgatives are also useful where there is something wrong in the digestive organs, and the sentient extremities of the nerves connected with those organs are thus affected. Where the chorea is accompanied by headache, depletion is necessary by cupping and leeches. The shower-bath is in many cases most useful. Arsenic is a mineral tonic which may be very effectually used. In a most severe case of chorea in another boy I ordered ten grains of the sulphate of zinc, and the boy recovered.

There are some other cases, my remarks on which

I shall defer until next Saturday. One of them is a case of severe headache. There are two or three cases of that very curious affection, hysteria, and another which turns out to be a case of mere diuresis, which is certainly not a very common malady in this hospital.

I had hoped to have some interesting remarks to communicate on the use of iodide of potassium, but those remarks must be reserved for another day.

ACEPHALOUS FŒTUS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Last week the Provincial Medical Journal contained an interesting account of an acephalous fœtus, and although you did not seem to coincide in the remarks of maternal impressions affecting the child *in utero*, yet with that impartiality which ought to characterise public journalists, you hesitate not to give insertion to Mr. West's communication. Should you deem the following case, which came under my observation, possessed of any interest to the profession, you will, perhaps, be kind enough to give it a place in your columns.

In April last I was called on to attend Mrs. — in her third confinement. She is in disposition remarkably cheerful, possessed of a vivid imagination, and in company gives expression to a rapid flow of ideas. On my arrival her pains were not very severe, but the os uteri was sufficiently dilated to permit an imperfect examination. Within the uterus my finger came in contact with a soft irregularly fissured mass, which I could not conceive to belong to any part of the ovum with the exception of the placenta. That it was not that organ which presented, I felt pretty confident from the complete absence of hæmorrhage ; but what it was else I could not decide until the os uteri became more dilated. Determined to wait patiently, and ascertain what the presentation really was as soon as that was practicable, I came down stairs and found the husband of my patient in a state of great anxiety. Immediately I entered the room he hastily asked me if all was right. Associating his hurried manner with my failure to obtain information of his wife's actual state, I inquired of him why he put such a question. In reply, he said that during the whole time of his wife's pregnancy she had entertained a most unaccountable dread lest her child should be like that of Mrs. L., who lived in the same street, and had given birth about five years ago to a living child, of which the head was exceedingly deformed, and the relative position of its organs much altered. When I saw this child, which is still alive and quite idiotic, it presented a very repulsive appearance—its eyes were red and vascular, and preternaturally large and prominent, and situated on the upper aspect of the head ; the brain was malformed and in a state of extreme atrophy, and the development of the facial parts excessive. This child had been seen by my patient about the commencement of her pregnancy, and had made such an impression on her mind as to alarm both herself and her husband lest their future offspring should be similarly deformed. Her husband told me that he had often wished to mention

the circumstance to me, but supposed I would treat it with ridicule. The pains now became regular and increased in severity, and on making a second examination, I found the os uteri sufficiently dilated to enable me to satisfy myself respecting the position of the child; still the same soft substance as at first met my touch; on passing my finger on, however, I could distinguish the features—the eyes, the nose, the mouth—and lastly, on carrying my finger round, my information was completed by feeling an ear. My mind was now relieved and satisfied; I had no doubt the child was monstrous; the labor was tedious, and the uterine efforts were very violent before the child was expelled. Although I was careful not to use any expression from which either the mother or nurse could infer that anything unusual had occurred, still no sooner was the child born than the mother expressed a wish not to see it; she knew, she said, how it looked. The child, which showed no signs of life, was, without exception, the largest I had ever seen; its breadth of shoulders and plumpness caused it to resemble one a month old; yet, though the trunk and extremities were faultless, the head presented such a degree of deformity as to have but little to identify it with the human form. The eyes were large, vascular, and prominent, and the orbits were bounded superiorly by the soft, bloody, and irregularly fissured tumor which I detected in my first examination. This mass was uncovered at any part by bone, and on making several incisions, it was found to contain nothing but blood, without even a trace of nervous matter, so completely did it occupy the place of the cerebrum and cerebellum.

To an ordinary observer this child, and especially its full, large, red eyes, bore a strong resemblance to the one which made such an impression on my patient's mind. Many such acephalous *fœtus* have been described, and every anatomical museum contains specimens of the kind; this case, therefore, can be of interest only in so far as it illustrates a doctrine held and supported by some of our best physiologists, and believed by the great mass of the community, as well in ancient as in modern times. That there is no direct nervous communication between the mother and child, may or may not be true; facts, they say, are stubborn things, and cannot be easily gainsaid. Persons engaged in the breeding of our domesticated animals recognise the fact, that impressions made on the nervous system of the mother *do* influence the character of the offspring; and without any ingenious theory, they, nevertheless, find it to be profitable in practice. Valuable though the case of Mr. West may be, this one I conceive to be still more so, in confirmation of the theory he would support. In his case the mother accounted for the phenomenon after she was aware of its existence; in the one which I have related, the character of the offspring was all but predicted by the parents; and when we remember how acute females are in their way of accounting for events, equal to, or above their comprehension, your editorial remark on Mr. West's case appears quite justifiable.

An instance of a similar kind was mentioned to me lately by a highly intelligent surgeon in this neighbourhood. He was called on to attend a woman of her first child, and immediately on delivery, before any of the attendants could see the child, the mother

anxiously inquired if it was all right. Her medical attendant asked her, why should it be otherwise? and in reply she stated, that eight months ago a person threw a mouse at her, which struck her on the upper lip, and that from that time till her confinement the circumstance had dwelt almost incessantly on her mind, and begot a firm belief that the child would be in some way marked. On bringing the child to the light, the mother's suspicions were found to be strictly verified, for, sure enough, on its upper lip there was a deep brown mark, presenting a very correct profile of the little animal which the mother so much dreaded. Its head, its body, its limbs, and tail, were all displayed with a fidelity surpassed only by the process of the immortal Daguerre. The lip of many of your readers may curl with the smile of incredulity; nevertheless, these cases are strictly true. The girl, whose case was related to me by the surgeon who attended her mother in her confinement, is, for anything I know to the contrary, still alive—a living evidence of the fact.

I am, Gentlemen,

Your obedient servant,

JOHN ALLISON.

Bridlington, Dec. 7, 1842.

ON TOBACCO INJECTIONS IN CASES OF ENTERITIS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The history of the two following cases, which I forward to you for insertion in the Provincial Medical Journal, illustrates the efficacy of tobacco injections in some severe forms of abdominal disease.

I am, Gentlemen,

Your obedient servant,

JOHN WATERS, M.D., M.R.C.S. (E.)

62, Torrington-square,

Dec. 4, 1842.

CASE I.—A lady, aged forty, of robust constitution, had been complaining of general derangement in her health for about a week, but not sufficient to prevent her attending to her domestic concerns, when she was suddenly seized with pain in the abdomen, but particularly in the course of the sigmoid flexure of the colon, and spine, and which she ascribed to the effects of cold. The pain increasing in severity, I was requested to see her. At my first visit, I found her sitting up in bed, the body flexed as much as possible anteriorly; she vomited incessantly, but only threw up a small quantity of viscid mucus. On pressing the abdomen she complained of pain, particularly in the left side; the heat of surface was natural, and there was no distension or retraction of the abdomen; some borborygmus; pulse 110, small, wiry; tongue slightly red, loaded at the base; no thirst or cephalalgia; the bowels had not been acted on during the last two days. I ordered her to be bled to syncope, and to take immediately five grains of calomel with one of opium. This treatment arrested the vomiting, but the dull, aching pain and borborygmus seemed not in the least relieved. The patient continued in this state without any appearance of improvement

during three or four days, the vomiting occasionally returning, but never free from a certain degree of nausea and troublesome eructation.

Having applied twenty leeches to the umbilical region, and persevered for some time in the use of fomentations and mustard sinapisms to the epigastrium, with little or no permanent relief, I had recourse to the frequent administration of saline purgatives, with tincture of hyosciamus, castor oil, &c. The latter remedies had the effect of removing the constipation, and some six or seven copious motions promised a salutary termination to the complaint; but as the symptoms recurred, and increased daily in severity, as a last resource I determined to try an injection of the infusion of tobacco.

The febrile state had now considerably increased, and assumed a typhoid character; the abdomen was augmented in volume, arched, and emitting a clear sound on percussion; on pressing the intestines, they felt as if united together, particularly on the left side, where the feeling of a soft tumor was perceptible; the heat of the abdomen was great; pulse, filiform, 120; insatiable thirst; the countenance expressive of the greatest anxiety; shrinking of the features; urine voided in small quantities and with pain; hiccup; respiration quick and laboring. I ordered a tobacco enema, which gave almost immediate relief; the pain became more moderate, for the horizontal position was now, for the first time, supportable; the sense of heat less, but the nausea increased; pulse much softer, and somewhat irregular; respiration slower, and could be taken more forcibly; the enema had been small, and the patient retained it for about half an hour, when the bowels were copiously moved three times; the abdominal pain now entirely ceased, and fomentations were applied to remove the knotted feeling of the intestines; the patient slept well, and next morning I found a marked improvement in all the symptoms. I prescribed an enema of castor oil and decoction of barley. The bowels were acted on twice; profuse diaphoresis set in; there was no return of pain; the abdomen was much less distended and softer; and nausea had completely ceased; pulse slower. In a few days, under the ordinary treatment, the patient was convalescent.

CASE II.—A man-servant, aged thirty-two, of a bilious habit, whom I attended during the last summer for a severe attack of scarlatina, about two weeks after complete convalescence, experienced alternate rigors and flushings, anorexia, cephalalgia, tinnitus aurium, pains in all his joints, lassitude, some vague pains in the abdomen, principally towards the right iliac fossa, which radiated towards the umbilicus, and were at this point rather aggravated on pressure; the pain generally came on in paroxysms, which caused him to writhe and twist about in the bed; right iliac region meteorised; no sudamina or eruption; diarrhoea had existed for the two previous days; nausea and occasional vomiting. He complained much of flatulency; tongue red at the point, covered with a yellowish fur at its base; thirst; coughed frequently, with scanty viscid expectoration. On auscultation, there was a slight crepitous râle in the superior lobe of the right lung; the contractions of the heart were weak, quick, and laboring; face pale, expressive of abdominal irritation. I prescribed thirty leeches to

the right iliac region, and when removed, a large cataplasm of linseed to be laid on the abdomen. Also—

Calomel, six grains;
Compound extract of colocynth, four grains;
Opium, one grain. To be divided into two pills;
one to be taken at once.

And three hours afterwards to have two tablespoonfuls of the following mixture, every two hours:—

Comp. infus. of senna, six drachms;
Sulphate of magnesia, three drachms;
Compound tincture of senna, two drachms;
Mint water, four ounces.

I saw him again in the evening. The leech bites had bled freely; bowels not acted on; pain on pressure and during inspiration; meteorismus extended; the lower extremities retracted; skin cold and clammy; excessive thirst; pulse, laboring, 96. I took sixteen ounces of blood from the arm, and ordered a warm bath; a saline mixture and decoction of barley for ordinary drink. The pills to be repeated.

August 29. Constipation continues; slept badly; had slight delirium; much sickness this morning; pain not abated. Prescribed an enema of castor oil and warm water, which produced a few slimy stools, streaked with blood; their excretion was painful; no headache. Repeat the leeches and cataplasms; and take the following pill every second hour:—

Calomel, two grains;
James's powder, one grain;
Opium, half a grain;
Compound extract of colocynth, two grains.

At night a half grain of acetate of morphia in six drachms of liquor ammoniæ acetatis.

30. Sleep disturbed; bowels well acted on three times; took castor oil but rejected it; meteorismus of the entire abdomen; pain more severe; the bowels are affected with spasm; the whole abdomen is painful to the touch; nausea; pulse 108, very weak. Continue medicines as before; fomentations.

31. Very delirious during night; passed no urine; hiccup and vomiting; bowels moved this morning, but bringing away a frothy mucus with little faecal matter; low muttering delirium; pulse 120, small; considerable borborygmus; abdominal pain intolerable; complained of pain in the hips and pubes. I threw up an injection of the infusion of tobacco, which he retained for about twenty minutes; at the expiration of this time, a copious faecal stool was obtained, of a dark color and excessively fetid. He now felt much relieved from the abdominal pain, as the spasmodic paroxysm had ceased, but the vomiting became incessant with marked irregularity in the heart's action. Small doses of morphia were now repeatedly administered, and in about four hours the vomiting and hiccup ceased, when sleep succeeded.

September 1. Had a better night; no delirium; lies quietly in bed, and only complains of weakness and a general dull pain in the abdomen, but no spasms; pulse soft, regular, 100. Repeated the tobacco injection, but in a more diluted state. Some slight return of vomiting, which combined with the medicinal effect of the tobacco, induced slight diaphoresis and a copious discharge of thick turbid urine; bowels well acted on. Continue the morphia.

2. A marked improvement has taken place; meteorismus and pain nearly gone; pulse 90. He con-

tinued gradually improving, taking little or no medicine, and on the 9th was perfectly convalescent.

REMARKS.

I was induced to have recourse to this powerful remedial agent (though, I believe, accompanied with some degree of danger), in consequence of having tried it on a former occasion, and that successfully, in a suspected case of intus-susceptio; but I can remember having seen its beneficial effects some three years ago in two cases of abdominal inflammation, where, from the intensity of the symptoms, we were induced to form the most unfavorable prognosis. In the two cases just related, nothing could be more evident than the rapid change from approaching dissolution to convalescence, and which could only be ascribed to the administration of the tobacco; for at the time of its being employed, both cases had assumed the very worst appearance, and scarcely an hour had elapsed when the spasmodic pain, borborygmus (and in a great measure the meteorismus), had entirely ceased; and in Case I, the horizontal position was only then, for the first time, supportable.

In both cases a diffuse diaphoresis succeeded, with considerable discharge both of feces and urine; in both the vomiting was increased, but soon ceased on the administration of small and repeated doses of morphia; there was also irregularity in the contractions of the heart, which did not continue for more than two or three hours; the feeling of prostration was not so great as I expected from the effects of the injection, but I ascribe this to the mitigation of pain in comparison with former sufferings. From the medicinal action of tobacco on the economy, I consider it a powerful weapon in the hands of the practitioner in all cases where the object is to remove or diminish excessive spasmodic pain or constriction, in lowering the heart's action, in promoting the function of the skin, in removing or diminishing the constriction that exists in intus-susceptio, and in obstinate constipation. Whilst a pupil at the Hotel-Dieu, I have seen it used as an enema in cases of asphyxia, &c., combined with potassio-tartrate of antimony. The form which I used was two drachms of the leaf infused in a pint of boiling water.

HYDATIDS OF THE UTERUS.

The subject of this case was fifty-two years of age, the mother of a large family, and who, with one exception, had gone the usual period in her pregnancies, never having exhibited the slightest indications of uterine disease.

In consequence of severe gastro-hepatic disturbance, she came under medical treatment in the middle of the month of August, 1840, when it was ascertained that the catamenia had not appeared in their accustomed manner six weeks before, but up to that time the menstrual returns had been healthy in every respect. The impression, therefore, notwithstanding her age, was that pregnancy had again taken place, an opinion in which she perfectly coincided. To allay the gastric irritation, the usual remedies were employed, but without avail; and after some weeks my patient began to manifest serious indications of impaired strength. Upon examination, at the end of the third

month, the uterus was found above the pubis; the breasts enlarged and sensitive, and a slight sanguineous discharge from the vagina was occasionally observed. The vomiting, however, continued with unabated severity. About the close of the fourth month, the uterus had ascended higher than usual, but not to such an extent as to excite either uneasiness or astonishment in her mind, as she considered herself not much, if at all, larger than on some former occasions. About a week after this visit, a sudden discharge, resembling the liquor amnii, and followed by uterine pains, took place, but subsided on the exhibition of an opiate. At the end of five or six days I received a hasty summons to attend her, and on my arrival found her in such a state of prostration from hæmorrhage that I little expected the enfeebled powers of the system would have survived. The uterus at this time was higher than the umbilicus, and upon making an examination, I found its mouth dilated, and a yielding body presenting. Stimulants, cold applications to the vagina and surrounding parts, with pressure to the abdomen, constituted the treatment at the moment. Large and repeated doses of the ergot immediately followed, which produced a powerful action, and enabled the uterus to expel a quantity of hydatids sufficient to fill a washhand bason. As the stomach still rejected stimulants in any form, small quantities of beef tea with laudanum were given from time to time, and after a vigilant perseverance of some hours, I had the satisfaction of seeing my patient free from impending dissolution. That the powerful action of the uterus was, in this case, the preservation of life, there cannot be a doubt, and it affords a striking example of the immense value of the ergot in arresting hæmorrhage from that viscus. Two years have now elapsed without any return, neither have the catamenia reappeared.

As the parturient symptoms, if I may so call them, clearly pointed out the only treatment which could be employed, I claim not, in the slightest degree, the adoption of any new practice; nevertheless, the record of cases is valuable, particularly when their pathological characters are involved in obscurity. That the primary symptoms of hydatids are sometimes strikingly analogous to those of pregnancy is, I believe, generally admitted, and they may, even by an old practitioner in midwifery, be mistaken for it. How far hydatids have their origin in a blighted ovum, or the retention of a portion of placenta, is still to be proved. That the retention of diseased structure may occasionally appear to favor such a theory, I can conceive, having met with a case in which half a dozen racemoid (?) looking bodies were expelled from the uterus of an unmarried lady from whom a large fibrous tumor had about six weeks before been thrown off by sloughing, but how the organisation of myriads of distinct and secreting bodies, connected by slender pedicles, and diminishing in size as they recede from the centre of circulation, is brought about, I cannot, in my ignorance, understand upon such principles.

May we, therefore, not look to the descent of Graafian vesicles, united by their membranous tissues, and receiving nutrient vessels from the uterine surface predisposed for their reception, as affording a more philosophical way of accounting for their development?

I offer these suggestions in the hope that some of your correspondents, accustomed to microscopic investigation, will favor us with their opinions.

J. B.

December 7, 1842.

WOUND OF THE ABDOMEN, WITH PROTRUSION OF THE INTESTINE.

By JONATHAN TOOGOOD, Esq.,

Senior Surgeon to the Bridgwater Infirmary.

William Webber, aged eleven, received a small wound from a penknife, on the right side of the abdomen, just below the hypochondrium. I found him lying on his back, with a considerable portion of the ileum protruding from the wound, into which the point of the finger could barely be inserted. The accident had happened two hours previously, and ineffectual attempts had been made to return the intestine. He was much exhausted, sick, with cold extremities, and a sinking pulse. The wound was dilated upwards, but the protruded part could not then be reduced; and at every attempt he cried so violently that more intestine was forced out. The opening was then enlarged transversely towards the umbilicus; considerable hæmorrhage instantly followed the incision, which I thought arose from the division of the epigastric artery. It ceased on pressure, when I replaced the intestine, and would have united the integuments, but found that the intestine protruded between the peritoneum, which obliged me to connect the latter to the aponeurosis of the external oblique muscle by four ligatures, leaving the ends out of the external wound, which was also brought together by suture. A compress was laid over the wound, and the whole supported by strips of adhesive plaster and bandage. There was no return of hæmorrhage.

He was put to bed, but his extremities remained cold, with sickness, vomiting, and a very small weak pulse. An opiate was given, and immediately rejected. The case was considered hopeless by the surgeon who had called me to his assistance and the friends of the patient; therefore, I was requested not to repeat my visit; but on the next day he was reported to have passed a good night. Some difficulty occurred in procuring evacuations, after which he went on favorably; all the ligatures came away by the twelfth day, and in three weeks the wound was firmly healed.

Bridgwater, Dec., 1842.

TREATMENT OF HÆMORRHOIDS.

By WM. E. HORNER, M.D.,

Professor of Anatomy in the University of Pennsylvania.

Two methods of removal are resorted to in the United States; the one immediate excision, the other strangulation by wire ligature. The French practice of the actual cautery has few or no advocates. The first mode is followed in some cases by enormous and alarming hæmorrhage, which in one instance I have known to be ultimately fatal. The wire ligature is occasionally attended with an agonising and excessive pain, which lasts from two days to a week, depriving the patient of sleep, and sometimes producing general

spasm. The above consequences are points of familiar and distressing experience to surgeons.

From four to six weeks are not unfrequently consumed, in the entire course of treatment by excision or the wire. The steps taken by myself present a combination of measures arising from these two dissimilar modes of operating, and leave the patient well, in from two to three weeks in bad cases, and in a shorter time in mild ones.

The plan here recommended is to calm the rectum by cold water injections for some days before the operation; a precaution, the value of which, I have learned from one of the best and most experienced surgeons we have, my friend Dr. Thomas Harris, of the United States Navy. The rectum being healthy at the time of operating, the patient, by straining in a squatting posture, forces the tumor or tumors out. He then goes to bed, and rests on the side corresponding with the tumor, and near the edge of the bed. A thick sail needle, armed with a large ligature, is then passed transversely through the upper part of the base of the tumor; the needle being removed from the ligature, the two ends of the latter are tied together, so as to form a loop. A stout awl then transfixes the lower part of the base of the tumor in a line parallel with the ligature above.

In a large protruded pile, the usual anal pouches or sacs are much enlarged, and have their orifices pointing downwards. The awl, when placed as intended, is between these sacs and the adjoining margin of the anus, and makes the part so firm, that it is more easily operated on subsequently. The inferior third of the base of the tumor is now detached from the anus with a scalpel, the anal sacs, and a corresponding loose fold of skin which commonly exists at the same time with large hæmorrhoids, going along with the tumor. Should the tumor recede, the loop above and the awl below enable the operator to draw it out. A wire noose is then thrown around the adherent base of the tumor, and drawn perfectly tight by the aid of a double canula. This noose occupies the previous incision, and it may be placed with great accuracy, from the command over the pile derived from the first ligature and the awl.

The tumor, if very large, may now be punctured so as to disgorge its blood. At the end of five hours, the part is perfectly dead by strangulation, the tumor may then be cut off near the wire noose, say three lines from it, for which act in the process of operating a pair of scissors will do, but, what is still better, Dr. Physick's tonsil instrument, owing to the accuracy of its line of incision. The wire noose itself may then be taken away, as the vessels are so compressed and deadened that no blood will pass through them.

The awl should be removed directly after the wire noose is applied and fixed, but the first loop should be retained for the final act—to wit, the excision of the tumor, as it assists very much. The operation thus completed, an injection of tincture of opium, half a drachm in two ounces of thin starch, puts the patient at ease, and he falls into a tranquil sleep.

I have now tried this combination of existing plans in several cases; it has the signal advantage of reducing pain and counteracting hæmorrhage, and is decidedly the best for large piles that I have seen used. The description of it is much longer in time than the opera-

tive process itself, which, when well arranged, occupies but a very few minutes, excepting the delay of the wire loop. My confidence in it is such that I now undertake with but little anxiety cases which I formerly approached with dread. Should other persons be tempted to adopt these rules, I trust that they will find in their own experience a confirmation of mine, and be saved from some of the most appalling scenes in operative surgery.

Where hæmorrhoids have existed several years—for many persons submit to them five, ten, or twenty years, even more, under a belief of their incurability, or of the hazard of an operation—they will be found complicated with prolapsus of the rectum. In such cases there are generally three tumors, one for each side of the anus, and a smaller one in front. The judgment of the surgeon here must determine whether he will dispose of them by one, two, or three distinct operations; also how much of the mucous coat of the rectum he will take away with the base of each tumor. No general directions on these points will meet the exigencies of each individual case. In the indurated or fig-like tumor, which is made almost wholly of coagulated lymph like the tumors of the labia interna of dissolute females, the immediate excision is the best process. My remarks are intended for the vascular form of piles, by far the most frequent, in my experience.

I will conclude by stating, that it is of importance to detach well, by the incision first alluded to, the base of the tumor from the internal sphincter muscle, without which precaution we cut through, instead of lifting up and removing a plexus of veins at the anus; we also leave thereby, unfortunately, a fold of tegument which swells and inflames largely, and the reduction of which swelling gives rise to a treatment as severe and protracted as a common attack of hæmorrhoids.—*Amer. Journ. of Med. Sci.*, Oct., 1842.

MANIA FROM DECAYED TEETH.

By Dr. WILLIAM MENDENHALL, of Beverly, of Anson Co., N. C.

A black boy, about twelve or fourteen years of age, was attacked with mania in the month of May, 1840, supposed to have arisen from overheating in trying to subdue a fire which broke out upon his owner's fencing. Cathartics, blistering, cupping, and venesection, with many other remedies, were tried, which relieved him, in some measure, during the greater part of the year 1841. But in January, 1842, he became quite a maniac again, and so continued, notwithstanding all the above remedies were used, together with shaving the head and the application of cold water, and opening the temporal artery, and taking considerable blood. A few weeks ago it was discovered that he had two decayed teeth in the upper jaw—one on the right, the canine tooth, the other on the left, one of the anterior molars—both of which were extracted, since which time he has been quite restored. The day before the extraction he escaped from the family, and passed the night in the woods, and was caught in the act of running away, after coming near or to the house in the absence of the family. Since that time he has regularly attended to business without showing any marks of insanity.—*Amer. Journ. of Med. Sci.*

PROVINCIAL MEDICAL JOURNAL

SATURDAY, DECEMBER 17, 1842.

Without travelling very far, indeed, into the regions of conjecture, it is difficult to account for the recent proceedings of the College of Surgeons, with regard to medical education. A straw thrown up will show, it is said, which way the wind blows; but the college have been throwing up so many straws and kites of all kinds that we are completely bewildered. The agitation of the college, however, is significant and portentous. Some people die quietly; some are violently convulsed before dissolution; a few sink tranquilly in the full possession of their faculties; but the shadow of approaching death, or the twinges of conscience, unsettle the nerves and disturb the minds of many. Are the recent oscillatory movements of the college signs of decay, or symptoms of dissolution? Time will tell, but the members of the college and the corporate bodies, with which certain engagements had been contracted, have a right to demand some explanation of conduct little calculated to increase respect for the council of the college, or sustain the respectability of the profession at large.

A few words will suffice to explain our views upon this matter. In October, 1841, the college published certain regulations, respecting the professional education of candidates for their diploma. Under these regulations a very respectable course of education was prescribed, including, amongst other improvements, attendance on the practice of surgery at some recognised hospital during a period of three years; and attendance on the practice of medicine during a period of one year. It was also announced by the council "that after October 1, 1842, candidates would *only* be admitted to examination under the regulations alluded to, except under peculiar circumstances of apparent hardship."

The amended regulations of October, 1841, were promulgated under the authority of the council of the College of Surgeons, and students had prepared themselves for the more costly and extensive acquirements expected from them, when, in the course of the present year, a rumour got abroad that the college was privately admitting great numbers of practitioners, without any regard to their own regulations—without requiring from them the same proofs of professional education, which less favored individuals were compelled to furnish. We were the first to direct attention to this mysterious mode of manufactory, but our information was declared, by a respectable contemporary, to be incorrect, and it was announced, demi-officially, that no new regulations had either been made, or were contemplated. The first portion of this announcement

was true, because the college had been for months *privately* violating its published regulations, and, therefore, might easily dispense with making new ones, as long as the thing remained secret; but contemplation there evidently had been, for on the 18th of November last the college sent forth the following extraordinary document:—

ROYAL COLLEGE OF SURGEONS IN LONDON.

The Court of Examiners having found that erroneous statements have lately been published respecting the mode in which gentlemen engaged in the practice of surgery may obtain the diploma of the college, and that other candidates for the diploma have experienced difficulty and inconvenience from inattention to the regulations, by which the required course of study has been, from time to time, augmented, or from inability to comply with those regulations, have resolved,—

“That gentlemen who were practising surgery prior to 1835, be admitted to examination on producing proofs of such anatomical and surgical education as may be deemed sufficient by the Court of Examiners.

“That other candidates be admitted to examination upon the production of the several certificates required by the regulations in force when they began their professional education by apprenticeship, or by attendance on lectures or hospital practice.”

EDMUND BELFOUR, Sec.

November 18, 1842.

Though unwilling, at any time, to attribute other than honorable motives to respectable men, we must say that the preceding resolutions of the college require explanation. The motive alleged in the preamble, if we may so call it, is illusory, and a contemptible blind to deceive the profession. If “erroneous statements had lately been published,” why not correct them in the usual manner? The periodical press is ever ready to assist the college in the correction of error and the dissemination of truth. But the statements were not erroneous. The error—the deceit—lay with the college; and it is little less than a barefaced subterfuge to make the correction of an error, which was of their own making, the pretence for issuing regulations totally unworthy of the college, and at variance with the spirit of the age. The error, we repeat, lay in this, that while the profession flattered themselves that the standard of surgical education had been raised, and the respectability of the profession elevated with it, the council of the college were inundating the country with the “tag-rag and bobtail” of the poor-law commissioners. The college cannot be permitted, as our Dublin contemporary has justly remarked, “to swarm the profession by a mob of incapables rushing into the scramble for poor-law sixpences.” The respectable members of the college throughout the United Kingdom have a right to demand what proofs of anatomical and surgical knowledge the Court of Examiners require from their new *protégés*, or why a new, and, for aught

any one knows, a totally unqualified and uneducated class of men should, at this eleventh hour, be thrust in amongst us. If the certificate system is to be abandoned, let the decision be boldly and fairly announced. If a practical examination be suited to one class of men, why not apply it to all? The junior candidates for a surgical diploma are as capable of sustaining a fair practical examination as their seniors, and it is gross injustice to require a long course of study and a heavy outlay of capital from the former, while the latter are admitted to all the privileges of the college, on the good pleasure of the Court of Examiners.

There must be, we repeat, some grave motives which are concealed—some secret influences, known only to the initiated, which have induced the council of the College of Surgeons to adopt their recent regulations.

Independently of the dissatisfaction that they must create amongst such members of the profession as still cling to its respectability, they are a flagrant violation of the arrangement concluded in 1838 between the colleges of London, Edinburgh, and Dublin. At that period the three colleges entered into an arrangement for the purpose of equalising and elevating the standard of medical education throughout the United Kingdom. The London college have, without any ostensible reason, violated the agreement then solemnly entered into, and it remains to be seen whether their departure from the straight path can be justified on the score of public utility. While the profession is distracted by discord, and its moral influence weakened by disunion, it is deplorable to find, in the governing bodies, neither wisdom of council nor consistency of conduct.

The subject of Mesmerism was again brought under the notice of the Medico-Chirurgical Society on Tuesday last. In accordance with the rules of this society, the minutes of the previous meeting, held on the 22nd of November, were read, and, as is the custom, the president proposed that they should be confirmed. The members of the Royal Medical and Chirurgical Society rose in a body, and refused to confirm the minutes of the Mesmeric meeting, so far as Mesmerism was concerned. Such refusal is, as may readily be conceived, a very rare occurrence at the Medico-Chirurgical Society, and signifies, in the most decided manner, their feelings with regard to a proceeding into which they may be said to have been unwittingly entrapped.

An outcry will, probably, be raised against this unusual and apparently severe measure, and the society will be accused of unfairly prejudging a question which, in a spirit of illiberality, it refused to entertain; but if the aphorism, *in extremis morbis extrema remedia*, be true, the society was called upon to meet an extreme case with an extreme remedy, and particularly to

mark with disapprobation the conduct of the authors of the paper in publishing their case without the sanction or permission of the society. It is a well-known rule of the Medico-Chirurgical Society, that any case or memoir presented to it becomes, as it were, the literary property of the society for a certain time, until the council have determined whether the said case be worthy or not of insertion in the Transactions of the Society. Every medical man who forwards a paper to the Medico-Chirurgical Society understands and submits to this implied condition, and if authors be possessed by so prurient a desire for notoriety, as to resolve on publishing their cases in the political journals, within twelve hours after delivery at Berners-street, they should seek some other channel than the association of honorable and distinguished men whose rules they deliberately and grossly violate.

It was, probably, some consideration of this kind which induced the society, on last Tuesday evening, to adopt the significant measure of refusing to confirm a certain portion of the proceedings at the memorable meeting of the 22nd of November.

By this refusal they have not prejudged the question of Mesmerism, or any other questions which may be submitted to them in a straightforward manner; but, if we interpret their intentions rightly, the society wished to express a decided and public dissent from proceedings which not only involve a violation of their rules, but are calculated to bring discredit upon the profession.

ACADEMY OF SCIENCES, PARIS.

December 5, 1842.

STRUCTURE OF THE TEETH.

A report was read by M. Serres, from MM. Dutrochet, Flourens, and himself, on the memoir presented to the academy by Mr. Nasmyth.

With regard to the microscopic investigation of the teeth (said M. Serres), some consider these bodies as being composed of solid fibres, variously arranged according as they are examined in simple or compound teeth; others regard them as an assemblage of tubes, filled either with calcareous matter, blood, or a colorless fluid; and all anatomists, with the exception, perhaps, of Malpighi, give the absence of areolar arrangement as the specific character of dental tissue. Mr. Nasmyth and Mr. Richard Owen, on the contrary, assert that the areolar arrangement constitutes the fundamental character of the structure of teeth, and they admit the cellular arrangement both in the enamel and the ivory. In order to establish this delicate and difficult point in the structure of teeth, Mr. Nasmyth submitted to the examination of the commission several preparations made from the teeth of the fossil megalichthys, lamna, cachalot, and elan.

In these preparations, with the aid of a magnifier of from 200 to 400 diameters, numerous areolæ, very similar to those of common cellular tissue, are seen between the fibres composing the ivory of the tooth.

The arrangement of the cells is different in each species of tooth, and this shows that the cellular arrangement does not depend on any optical delusion arising from the use of the microscope. As the inter-fibrous or inter-tubular tissue is organised and cellular, we can readily understand how this arrangement may serve as a distinctive character of different kinds of teeth, or even of their varieties in the various classes of vertebrate animals; we must, however, observe, that after varying the mode of illumination in every possible way, we were never able to see the walls of the cells in so perfect a manner as they are represented in Mr. Nasmyth's preparations marked 1 and 2. After having proved the areolated or cellular arrangement of the interlobular tissue of the ivory, the author considers the nature of the fibres which contribute to its formation. Are they hollow or solid? or, in other words, are the teeth composed of a collection of tubes or of fibres? This long debated question is not yet solved. Malpighi, relying chiefly on the structure of the teeth in fishes, considered them solid. Leeuwenhoek, whose observations were much more exact, regarded them as hollow, and recognised the tubular arrangement in the human tooth. Havers, Reichel, and Howship, who employed the microscope, took up Leeuwenhoek's opinion; while Herissant, Herbenstrut, Albinus, Sœmmering, Scarpa, Bichat, and Meckel, who did not avail themselves of the instrument, declared in favor of Malpighi. The existence of a tubular structure in the teeth was therefore doubtful, when Purkinje, and especially Retzius, made this point the subject of numerous microscopic observations. The latter found that it was much easier to distinguish the tubes, when the preparation had been placed for some time in spirits of turpentine, to increase its transparency. Müller repeated the observations of M. Retzius, and saw ink rising through the tubes of the tooth and injecting them by the force of capillary attraction. M. Dujardin, in his recent work, also admits the existence of tubes, and, on repeating the observations of M. Retzius (said M. Serres), I saw in several preparations a series of blood globules corresponding to the openings of the tubes in the dental cavity.

Mr. Nasmyth forwarded several preparations (Nos. 5, 6, 7, 8) for the purpose of showing that the tubular arrangement does not exist in the ivory. On examining these with a power of 300 to 600 diameters, we see fragments of dental fibres, sometimes continuous fibres, in the thickness of which may be distinguished variously formed areolæ, called by Mr. Nasmyth multilocular fibres; but this elementary and globular form of the fibres does not disprove the existence of tubes; for all anatomists admit that these tubes have parietes, and the preceding observations refer entirely to the parietes of the tubes. On comparing figures 2 and 3 of Mr. Nasmyth's memoir with figure 4 of Leeuwenhoek's, on which the existence of tubes was originally admitted, we feel justified in asserting that Mr. Nasmyth's preparations are in no way calculated to overthrow the observations of his predecessors, which established the tubular structure of the ivory of teeth.

But if we are disinclined to agree with the author on this point, we must acknowledge that he demonstrated the cellular arrangement of the enamel in the

clearest manner. Preparations 9 and 10 are so well made, and represent so distinctly under every magnifying power the cellular structure of the enamel, that we may affirm the beautiful observation of Eustachius has been recovered, after having been so long lost. In the sixteenth century, Eustachius described the enamel of the tooth as possessing a cellular arrangement, which he compared to the areolæ of a honeycomb; but this observation was completely neglected, probably because it was impossible to understand how so delicate a point could have been discovered without the aid of the microscope. Purkinje and Müller had, it is true, recently described a prismatic elementary form in the enamel, but the cellular arrangement announced by Mr. Nasmyth and Mr. Owen, without any knowledge of the remark of Eustachius, was entirely unknown to them. Before the time of Eustachius, anatomists paid little attention to the structure of the solid portion of the tooth. The curious ideas of Plato, Aristotle, and Galen, respecting their formation, were a subject of debate amongst physiologists. Diemerbroeck thought that the permanent teeth were produced from the roots of the milk teeth. Eustachius refuted this error, and established on positive researches the basis of this interesting portion of human embryogeny. Rau, a pupil of Haller, took up Eustachius' ideas, and asserted that the dental bulb was composed of two membranes; one, the envelope previously described by Malpighi; the other a constituent membrane, forming, by its duplicatures, the basis of the bulb and the rudiment of the tooth. He admits the existence, in the meshes of this latter membrane, of vesicular glands, furnished with blood vessels, which secrete the dental substance in the same way that the glands of the Schneiderian membrane secrete the mucus which lines it. Hunter described the tooth as a secretion from the surface of the bulb, and in this way gave a satisfactory explanation of the manner in which the bulb is enveloped by the substance of the tooth; but his theory had the effect of diverting attention from its internal organisation, and contributed to support the idea, sanctioned by Cuvier and Bichat, that the teeth are inorganic bodies.

It was for the purpose (said M. Serres) of modifying this theory that I published, in 1817, a work on the structure of the bulb, and on the arrangement of blood vessels in its interior; and in 1819, I endeavoured to show that the teeth are subject to the same laws of development as bone. Finally, the researches of M. Flourens on the mode of formation of bone, and those of M. Duvernoy, show that they completely reject the theory which regards the teeth as devoid of organisation.

What particularly struck the reporters in the memoir of Mr. Nasmyth was, the attempt to establish a similarity of organisation between the enamel, ivory, and bulb. Having found the cellular arrangement in the two former parts, he sought it in the bulb, and his preparations show the areolar structure in a very clear manner. In some preparations there is a reticulated appearance; in others the areolæ bear a resemblance to the arrangement which Mr. Nasmyth denominates vesicular. Other preparations show the cellular structure of the pulp, and the reporters not only made similar preparations, but also found, in fresh specimens, the granulation of the areolæ mentioned by Mr. Owen.

The injected preparations of the bulb in the foetus and infant, which Mr. Nasmyth submitted to the inspection of the committee, were the most beautiful and the most complete that they have ever seen, but they are evidently a repetition of those made by M. Retzius, at Stockholm,* although the latter are not alluded to by Mr. Nasmyth.

If we consider, with Hunter, the teeth as a product of secretion from the external surface of the bulb, we are led to conclude that the enamel is also deposited on the crown by its enveloping membrane; an idea to which the recent researches of M. Duvernoy give a very high degree of probability; but it is, on the other hand, difficult to reconcile this theory with that of interstitial secretion, thrown out by Rau, and supported by Mr. Nasmyth and Mr. Owen. Indeed we must confess that if the labors of these latter named gentlemen have demonstrated the mode of formation of ivory, they have thrown no additional light on the manner in which the enamel is produced. Mr. Nasmyth had described a membrane enveloping the enamel, and passing down over the root of the tooth to enter its cavity, but neither the committee nor Mr. Nasmyth were ever able to obtain anything resembling a perfect membrane, much less a capsule.

In conclusion (said M. Serres) no one, as far as we know, has ever executed a more perfect collection of preparations than those presented to the committee by Mr. Nasmyth; and the careful study of them made by your committee, in conjunction with the drawings published from the time of Malpighi and Leeuwenhoeck, to that of Retzius and Owen, enables us to assert that Mr. Nasmyth's preparations illustrate completely the microscopic anatomy of the teeth of mammalia, from the structure of the pulp to that of the enamel and ivory. Hence the committee propose that the Academy of Sciences mark with their approbation the memoir of Mr. Nasmyth; and would demand its publication unless the author expresses his intention of shortly printing it himself.

BIRMINGHAM PATHOLOGICAL SOCIETY.

November 5, 1842.

WILLIAM TARLETON, Esq., in the Chair.

NECROSIS OF THE CRANIUM.

Dr. Fletcher introduced a specimen of very extensive necrosis and exfoliation of the whole thickness of the frontal and parietal bones, which had been caused by a blow on the head of a poor patient of his, in whom there was also a syphilitic taint of constitution. This man had lived for about eight years after the blow, the disease gradually advancing; and for the last five years of his life he had an extensive ulcer on the scalp, which secreted an abundance of pus, to which the pulsations of the brain were freely communicated. The bone was very extensively felt at the bottom of the ulcer, and under the scalp, by a probe passed under its edges. Although in this state, he went on at times committing excesses in drinking, and at times undergoing great privations, occasionally using great exertions, and frequently exposed for days together to summer heats and

* In a work by Mr. Nasmyth, much anterior to his memoir, a considerable space was devoted to an explanation of the labors of M. Retzius, and his mode of preparation.—Eds.

winter chills, frequently lying out nights together in all seasons of the year, and living, in all respects, a most irregular life; and yet during all this the brain remained perfectly free from any symptoms of disease. He sunk at last in the Shiffnal workhouse, from constitutional irritation. On examination of the head after death, extensive adhesions and thickenings were found in the membranes, but the brain was quite free from disease.

SCIRRHUS OF THE STOMACH.

Dr. Fletcher then brought forward two specimens of scirrhus contraction of the cardiac orifice of the stomach. One had occurred in a patient of his own; the other had been presented to him without any history of the case.

John Dalrie, aged fifty-four, presented himself as a patient at the Birmingham General Dispensary, in June, 1839. He was much emaciated, and complained of sickness, pain in the epigastrium, great weakness, constipation, and inability to take even small quantities of food without immediately vomiting; his tongue was white, and his pulse feeble and quick. These symptoms had been gradually coming on for five or six months, previous to which he had always enjoyed good health.

On examination of the epigastrium, chest, and abdomen, no tumor or other sign of disease was discovered.

On examining the patient from time to time, the symptoms were found to be aggravated; the emaciation, pain, and sickness, became augmented; and, for the last month before he died, he very rarely swallowed even a teaspoonful of liquid that was not rejected immediately it reached the cardiac termination of the œsophagus. The nature of his disease was very clearly indicated. The poor fellow seemed to dread the effort, and put himself into extraordinary positions in attempting to swallow food, in order to facilitate its passage into the stomach, and as if to get it to pass down the œsophagus without allowing this tube to be sensible of its presence. Means were employed for his comfort and the prolongation of his life; but the emaciation and weakness increased, and, after being entirely confined to his bed for the last fortnight, he died in October, apparently from starvation, on the 15th of which a post-mortem examination of the body was made, fourteen hours after death.

The head was not examined.—*Chest*: The lungs and heart were found quite healthy. The œsophagus was healthy down to just above the diaphragm, where it was affected by a scirrhus hardness.—*Abdomen*: The stomach was contracted and contained nothing but a few undigested currants. The cardiac orifice was so contracted as but just to allow a silver probe to pass through; it projected into the cavity of the stomach, and in its contracted portion two currants were found. (He had swallowed these in a bun reduced to pulp, in which there were a few currants, three or four days before his death.) The small intestines were contracted. The colon was large (probably in consequence of the nutritious enemata which were continually used to support him during his illness, and from which he derived comfort). The liver, spleen, and pancreas, were healthy. The kidney and urinary apparatus was healthy.

SCIRRHUS OF THE PANCREAS.

Mr. Crompton brought before the society a specimen of true scirrhus pancreas, which he had removed that day from a man named Brown, a gardener, about sixty years of age, who, for more than two years, had been under various medical men for what was considered a stomach complaint. Mr. Crompton had seen him only occasionally, but had been particularly attracted to the case since the beginning of the present year, owing to the peculiar pallid appearance of the patient, which reminded him of the cases of diseased pancreas mentioned in these reports (April 2). The progress of the case tended so strongly to confirm Mr. Crompton's suspicions as to the probable nature of the case that, though he did not regularly attend the patient till the last six months, and then only at intervals (more from curiosity than because his assistance was asked for), he was anxious to examine the body, which he did three days after death, not having been apprized of the event before. The constant and most prominent *symptom* was continued pain just below the ensiform cartilage, which, as well as the ribs in this person, was remarkably low. The pain was sometimes "a hot sensation," sometimes "springing into the back;" he did not complain of pain in either of the shoulders; the chest sounded well; the pulse good, though at times somewhat quick; there was no vomiting at an early stage of the complaint; the bowels were pretty regular, and the motions, when he examined, were of a good color; urine rather high colored; appetite irregular, though he was often surprised at the sort of food he eat without seeming to suffer from it; he always eat sparingly, as he suffered more after a full meal. He worked in his garden, sometimes taking the medicine ordered him, sometimes trying other peoples' advice, and sometimes doing nothing for the complaint till the last weeks of his life, and then the *emaciation* was extreme; there never was dropsy during any period of the disease; he was once or twice somewhat yellowish, and when Mr. Crompton first saw him, he thought there was a torpid or congested state of the liver, though he never could feel it under the ribs, nor could he, at any time, detect any tumor; but the patient could not bear pressure on the pit of the stomach. He ordered him blue pill, with extract of conium, in small and repeated doses, with an alkali and calumba; then, when he saw him yellowish, he gave him the liquor potassæ and decoction of taraxacum; then the dilute nitric acid, which he could not bear. The emaciation and whiteness progressed; his bowels were generally open, often somewhat relaxed, though, when he happened to see the dejections, they were of good color. Scirrhus of the stomach sometimes occurred to him, as the possible nature and termination of the case; but he did not find that the ingesta of various sorts produced the increase of pain he thought would follow their use. He was pretty sure the liver was not large; he suspected it might be diminished in size. There was no vomiting till within the last month, and then only for two days, which he attributed to eating some duck the day before; the tongue was constantly covered with a brown fur at the base, and down the centre; it was not chapped, as occurred in a remarkable manner in a case mentioned by him on the 2nd of April last; the mouth was generally clammy; the skin dry and harsh.

The only medicine that relieved the patient was a pill composed of the *pil. saponis cum. opio. and ext. hyoscyami*, in equal parts, which he took whenever he was in much pain, and regularly at bedtime, and in the morning.

Post-Mortem Examination.

The body was extremely emaciated and very exsanguine. On opening the chest, the right lung was found firmly adherent to the pleura costalis by old adhesions over the whole surface; on the outer or pulmonic surface of the thickened pleura pulmonalis was a cruciform portion of bone, substantiating, as far as this specimen can, the remark of Dr. Hodgkin, who, in his second "Lecture on the Serous Membranes," says, that ossification happens much more frequently beneath the attached surface of the serous membranes than on the secreting surface. The heart was small and had no fat about it. The lungs, except in two or three places near the upper portions, were healthy; in the upper lobes were two or three cavities containing chalky or calcareous deposits. The liver was small and quite buried under the ribs, with small hard scirrhous tubercles, from the size of a pea to that of a nut, scattered through its substance; they were more numerous in the substance than on the surface. The stomach was healthy, the gall-bladder contained fluid of a reddish cast, and of the consistence of mucus; the cystic duct was obliterated by a deposit, which was, as it were, continued into one on the surface of the duodenum, which led him to suppose that it had continued along the duct, but on examination after removal, he found he had lost that duct as well as the pancreatic.

The pancreas was as hard as cartilage, and on the left side was distended by a large cyst (which, on removal from its situation, where it was firmly bound down) was ruptured, and gave exit to a quantity of bloody fluid; the spleen and kidneys were healthy. The mesenteric glands were many of them as large as nuts, and of cartilaginous consistence. He did not find any similar disease of the bowels. In the hurried examination he was obliged to make, as it was against the wish of the patient's wife, he forgot to examine a hard gland under the right ear, which he remembers to have seen when he was living, and which he had had for many years, and which had not given him any uneasiness; he believed it was an absorbent gland, and not the parotid. In answer to a question from Dr. Fletcher, Mr. Crompton said he was not aware of there having ever been pytalism or fatty stools; he had not seen the motions more than four times.

SHEFFIELD MEDICAL SOCIETY.

Dec. 1, 1842.

The PRESIDENT in the Chair.

LACERATION OF THE UTERUS.—GASTROTOMY.

Mr. W. Jackson exhibited the uterus of a patient who died under the following circumstances:—She had had two children, and labor for the third time commenced at five o'clock on the morning of November 19. She was attended by a midwife; at eleven, a.m., the waters were evacuated, and at four, p.m., during a very violent pain, a large quantity of blood was evacuated, and the patient became very faint and low. About six, p.m., Mr. Jackson saw

her, and found that the uterus was ruptured, and that the child had escaped into the cavity of the abdomen. He immediately resolved to perform the operation of gastrotomy, which he accordingly did, and extracted a child weighing eleven pounds and a quarter. On removing the child, the membranes appeared to be perfect, but on examination were found to be filled with three or four pounds of blood. The patient appeared to be benefitted by the operation, the prostration being relieved almost immediately. Everything seemed to be going on favorably for five days, the wound healing, and the powers of life apparently rallying; on the sixth day, without any apparent cause, she began to sink, and died on the seventh. On inspection, the uterus was found without any mark of inflammation, and contracted to the dimensions which it usually has on the seventh day after delivery. There was no effusion into the peritoneal cavity, and no very marked appearance of inflammation of the general peritoneal surface. The rupture occupied the posterior coats of the vagina longitudinally to the extent of about three inches and a half, and transversely to the extent of more than two inches, just at its attachment to the cervix uteri. About half an inch, also, of the cervix itself appeared divided in the longitudinal direction.

SENILE GANGRENE.

Mr. Porter exhibited the heart, aorta, iliac, and left femoral arteries of a woman, aged eighty-two, who died of gangrena senilis. In the left ventricle, immediately under the lining membrane, was an irregular deposit of bony matter, about the size of a hazel nut. Plates, and in many instances complete rings, of a similar character were found along the whole extent of the arteries, and these were stronger at the points where the vessels bifurcated.

REFLEX NERVOUS FUNCTIONS.

The paper for the evening was by Dr. Favell "On Certain Morbid Phenomena illustrative of the Reflex Function of Nerves." The Doctor commenced by stating that he should not enter upon the different views which physiologists entertain on the subject of reflex function, but rather draw the attention of the members to a practical illustration—viz, the occurrence of chorea in cases of pericarditis. He maintained that the former of these affections is occasionally the consequence of the latter, and that sometimes it entirely masks the original inflammatory disease. He agreed that there is nothing more extraordinary in this catenation than in the occurrence of chorea from worms or any other source of irritation in the intestinal canal; and that the fact of that irritation being reflected from the seat of lesion is sufficient to account for the usual symptoms of pericarditis being greatly masked and sometimes entirely overlooked. The author afterwards proceeded to enumerate several examples in proof of the position he had laid down. He quoted a remarkable case recorded by Dr. Bright in the Medico-Chirurgical Transactions, and one by Dr. Yonge, of Plymouth, in Guy's Hospital Reports, and gave the particulars of two cases which had occurred to himself. In March, 1841, a young woman, aged twenty-one, married, was brought into the Sheffield Infirmary on account of severe chorea, which was of so aggravated a nature that she could neither sit, stand, nor lie. The convulsive motions were so ex-

cessive that it required two persons to hold her in bed. She had been suffering for a considerable time (before admission) from rheumatic fever, towards the conclusion of which she experienced a good deal of palpitation of the heart, which was soon followed by chorea. At the time of her admission the intelligence was unimpaired, the respiration natural, and the only complaint she made was of severe pain in the head and palpitation of the heart. The bowels were confined; appetite bad; tongue furred; pulse 96, regular, and of tolerable strength. The spinal column was very carefully examined, but not the slightest degree of tenderness could be detected in any portion of it. On percussing the præcordial region, there was no increase of dulness, but *there was a distinct friction sound heard with both the first and second sound of the heart.* On the third day the patient died, and eight hours afterwards the body was very carefully examined, but the only abnormal appearances detected were in connection with the heart. The external surface of the pericardium was very vascular, and adhered extensively to the left pleura; the quantity of fluid in the pericardium was not greater than natural; there was a considerable patch of vivid redness on the surface of the membrane covering the heart about the base of the left ventricle, and the pericardium reflected over the great vessels was very much injected. The left ventricle was thicker than natural, and the mitral valve was slightly thickened and indurated.

The second case was that of a boy, aged nine, who had been ill for six weeks previous to his admission into the infirmary. At the period of his admission he complained of severe cough, dyspnoea, and palpitation of the heart. On percussing the chest, the right side was found to yield a good resonance throughout, but on the left side the dulness was much more extensive than natural; a slight sibilant ronchus was perceived in each lung; no fremitus felt on placing the hand over the region of the heart; impulse increased; a prolonged and loud blowing heard with the first sound of the heart, and synchronous with the impulse, immediately beneath the left mamma; the abnormal sound is also heard, but less distinctly along the sternum, as high as the cartilage of the second rib; the second sound normal. Pulse 120, regular. The boy could give no history of his own case, but the following particulars were obtained from his mother:—"His complaints commenced with muscular twitching on one side of the body; the boy was so violently twitched as almost to prevent him walking; sometimes it was violently drawn to one side. The arm on the same side was also so much affected that he could not raise anything to his mouth in a spoon. After these symptoms had continued for a short time, the inferior extremities began to swell, and the twitchings gradually subsided." His intelligence was never in the slightest degree affected. After death, which occurred about two months after he entered the hospital, there was no morbid appearance detected, except in connection with the heart. The pericardium, externally, was much injected, and adherent to the left pleura; it was also very firmly adherent to the heart from base to apex, so that it was almost impossible to effect a separation. The heart was considerably enlarged, and its substance rather soft. The right auriculo-ventricular opening natural, and the

tricuspid valve healthy. On the left side, the auriculo-ventricular opening was normal, but the mitral valve much thickened and indurated. The middle segment of the aortic valve was slightly thicker than natural, but the other portions were healthy.

The author afterwards proceeded to remark, that spasmodic affections of different sets of muscles have frequently been observed in connection with pericarditis, and quoted illustrative examples from Andral, Bouillaud, &c. The practical lesson deduced from the whole was, that *it is important in all cases of severe and sudden spasmodic affection carefully to examine the state of the heart by means of the stethoscope.*

ANEURISM OF THE FEMORAL ARTERY,

SHOWING THE IMPORTANCE OF APPLYING A LIGATURE BELOW, AS WELL AS ABOVE THE SAC.

By WM. E. HORNER, M.D.,

Professor of Anatomy in the University of Pennsylvania, Surgeon at the Philadelphia Hospital, &c.

In the number of this journal for January, 1841, I related two cases of varicose aneurism, in which the necessity of a ligature above the sac, and of another below it, was proved. I have now to detail a similar exigency in *simple aneurism*, and which will suggest the value of reconsidering the present rules of treating that disease.

Isaac Davis, a colored man, a carpenter, aged forty-eight, of a constitution apparently worn, though he says that his life has been temperate, regular, and industrious, came into the Blockley Hospital on the 6th July, 1838, with a tumor the size of the fist, in the right inguinal region, extending itself outwards. It is hard, resisting, diminishes but little on pressure; has an aneurismal thrill at the inner side of it, and when a stethoscope is applied, the rushing tumultuous noise of a fluid in violent agitation is easily perceived. Pressure upon the femoral artery, below Poupart's ligament, arrests the pulsation, the thrill, and the noise. He suffers extreme pain in the part, with numbness of the limb and foot, which are somewhat anasarcaous. He first perceived the tumor eleven weeks before, shortly after a strain in handling a piece of scantling; it was then the size of the last joint of the thumb, and pulsated violently; it has grown constantly since, and according to his account, the pulsation is most distinct in the early forenoon, the tumor being then, also, larger than in the afternoon. Since his introduction into the ward, it has evidently grown daily, and the pulsation, from being obscure to the feel at first, has become distinct and satisfactory.

He entered the house anxious for an operation, his mind having got its tone from the practitioner who previously attended him. The proximity of the tumor to Poupart's ligament, with which it was immediately in contact, and seemed to lift up, together with my doubts on the state of the artery above, disinclined me strongly to an operation; the solicitation of the patient, however, prevailed with me on the 14th inst., and I accordingly undertook the operation on the 17th of July, at twelve o'clock, by the consent, and in the presence, of the surgeons, Drs. Harlan and Pancoast, who assisted me materially in the progress of it.

There were several younger surgeons present, not of the house, the students of the house, and Dr. Gerhard, with his clinical class.

The first act of the operation was to cut through the skin in a line of four inches length, nearly parallel with Poupart's ligament, the upper end of the line somewhat above Poupart's ligament; an incision was then made, also, through the skin from the first over the course of the femoral artery along the inner side of the tumor for two inches. The fascia superficialis was cut through in the same lines. Poupart's ligament was then detached from the fascia lata femoris; the inferior edge of the internal oblique and of the transversalis were then raised up. Finding Poupart's ligament very much on the stretch, from the pressure upwards of the tumor, I divided transversely a few of its fibres. I then moved the peritoneum and the subjacent cellular substance aside, and having felt distinctly the pulsation of the external iliac artery, I passed about an inch above Poupart's ligament my large hæmostatic hook, with its ligature around the artery from within outwards; in this I was directed wholly by the touch, as the parts were so confined as to render vision unavailing. Finding some difficulty in slipping the ligature over the point of the hook, I loosened the handle and brought out hook and ligature with the aid of a pair of pliers. A ligature being then under the artery, I tried repeatedly, by pressing the artery with the ligature against the end of a finger, whether the pulsation of the artery below the ligature, and of the tumor ceased, and found it to do so; the other surgeons of the house joined in the same experiment, as well as Dr. Johnson, one of the surgeons invited. The control of the circulation of the external iliac being thus evident, the ligature was tied, and the pulsation of the aneurism ceased instantly.

Apprehensive from what had occurred in the case of Gen. P. to Dr. Harris and myself in varicose aneurism, and with Dr. Randolph, in the same kind of disease (see *Am. Journ. ut supra*), that there might be some supply of blood to the sac besides, I determined to ascertain by opening the tumor, which I did very freely, and turned out of it half a pint of laminated fibrin, and as much fluid arterial blood. The blood collected with extreme rapidity in the sac, and we encountered almost immediately a formidable and urgent hæmorrhage from it, which, notwithstanding the introduction of sponges and pressure on them, yielded from sixteen to twenty or more ounces of blood in a few minutes. I was certainly not prepared in mind for so much bleeding; the mode to meet, or rather anticipate it, would have been to have two tourniquets on after the artery was taken up, one at Poupart's ligament, the other below the tumor; and having screwed up the upper one to press from the tumor all its fluid blood, and then to screw up the lower tourniquet; next to open and clear the sac of its coagulum, then loosen the upper tourniquet, and take up such vessels as bled, and do the same afterwards with the lower tourniquet. I might have saved the patient sixteen ounces of blood, by such precautions.

Dr. Harlan pressed on the femoral artery below the tumor with some effect; he then proposed to confine the limb just below the tumor with a tourniquet; this was done instantly; a simultaneous fainting of the pa-

tient lasting, for four or five minutes, was attended with a diminution of the hæmorrhage.

I then laid open the sac still more freely by the previous crucial cut being extended, in doing which the femoral artery at the lower and inner side of the sac was cut through; ligatures were thrown with my hæmostatic hook below and above the cut through the femoral artery, by which the bleeding was measurably reduced, but not suppressed. I next made a further exploration of the sac, and found that the femoral artery was bleeding into it from above the sac. The artery was next secured there, also, by a ligature, with my hook. The hæmorrhage upon this ceased entirely, as a careful examination of the whole interior of the sac exhibited no bleeding orifice; but for fear of the insufficiency of this ligature of the femoral artery, which was put on in some haste, I placed still another above it.

A process of the sac was found to have passed for some inches upwards under Poupart's ligament into the abdomen; it was just within the anterior superior spinous process of the ilium. This accounted for the extreme tension of Poupart's ligament during the operation, and the great difficulty I had in making space to work the instrument for taking up the external iliac.

The entire operation lasted forty-five minutes. An interval was then allowed to see whether all was secured, which appeared to be the case. The dressing was next executed; the edges of the cuts were kept apart by lint—that is to say, the cut for the iliac artery as well as the cut into the aneurismal tumor; they were then approximated with strips of sticking plaster, and fixed in place with a compress and a bandage of the figure of 8. The patient was put to bed, and in a little time his circulation and vivacity were strong.

At this moment the following questions arose in my mind:—Where did the hæmorrhage from the sac come from?—by what routes?—not the external iliac, because we had every evidence of that being fast? The routes open to this suspicion are the epigastric and circumflex iliac, for the bleeding from that end of the femoral artery above the sac; and the profunda, for the femoral bleeding below the sac. The originally diseased portion of the artery was about two inches long. The sac was upon one side of it, the iliac, exclusively and expanded to form a tumor as capacious as a pint measure.

As I did not see the profunda, I had no distinct conception of its place of origin.

July 18. Is in a tranquil good state to-day. The limb has its natural temperature (the weather is very hot, thermometer at 80°). The pain which was formerly in it from the aneurismal tumor is gone, and it feels, according to his account, natural; a previously existing œdema of foot has also subsided; his pulse is good; from some cause or other he was seized during the night with dyspnœa. Ordered a large sinapism to thorax.

Tartaric acid, ten grains;

Tartarised antimony, one grain;

Sulphate of magnesia, six drachms;

Water, eight ounces. Mix. Half an ounce every two hours.

19. His breathing to-day is hurried and catarrhal, as if there were an accumulation of mucus in bronchia; his countenance has rather a distressed appearance, and though he is perfectly collected, he does not seem

quite so well; his pulse last night, Mr. Wendel the senior student informs me, rose to 140; it is now full, soft, and short. I ordered a blister plaster to front of thorax; vol. julap, half an ounce every two hours, with a dose of tincture of lobelia in the same, according to indications.

The wound a little sore to touch, says it hurts when he coughs.

20. The patient had another attack of difficult breathing last night, but not so severe. Dressed the wound; found that it had suppurated somewhat, and that there had been an effusion at its edges of coagulating lymph. He is very much debilitated, and his breathing is high and short, with occasional cough; limb generally easy, excepting ankle and heel, which are painful; its temperature natural; no pulsation perceptible in pedal artery. Ordered mush and milk for his diet. Compound tincture of cinchona, one drachm every two hours. Bowels not having been opened since the day of operation, directed a deserts-poonful of castor oil every two hours till that was accomplished.

21. Oil produced five free evacuations. Breathing not so labored. Dr. Gerhard having explored the front of the lungs for me, concluded the left to be nearly sound, the other with a slight mucous rattle in the cardiac region. Had a very severe chill before I saw him; debility increased; voice feeble; countenance rather collapsed; wound in about the same state as yesterday, very inconsiderable suppuration from it; the aneurism is now simply a fissure, about capacious enough to lay the whole length of the fore finger in; great pain in leg from knee to foot; temperature of limb good.

22. Symptoms of feebleness increased; leg rather cold; wound flabby, inactive, and has merely secreted a little serum with some pus; voice weak, and made with effort. Has had another chill this morning.

Directed sulphate of quinine in solution, one grain every hour. Egg, milk, and brandy, *ad libitum*. Wound to be dressed with a suppurative poultice, made of bread, milk, and basilicon ointment. Touched the surface of it with spirits of camphor.

He died this afternoon at four o'clock.

Autopsy.—July 23, eleven o'clock, a.m. The weather being still very warm, some advance in putrefaction; the parts operated on were, therefore, black and discolored on their surface.

The external iliac was inflamed to a deep red from the ligature to a few lines of its root, and contained a loose thin coagulum of blood adhering to its sides. It had been secured precisely at the point intended—to wit, just above the epigastric, and the ligature had been properly drawn; neither the peritoneum nor the iliac vein was injured. A recent suppuration in the sub-peritoneal cellular substance was found to start at the ligature, and ran up the iliac fossa and loins to terminate behind the right kidney, where a sort of font was formed behind the *psaos magnus*. Pressure by the tumor upon the surrounding muscles had hardened and changed their structure; some caries had occurred on the ilio-pectineal protuberance from that cause. Wishing to make a more deliberate examination, I cut the parts out to prepare in spirits of wine. The structure being cleared by this process, I found that an aneurismal orifice of an inch in length,

existed on the iliac side of the femoral artery; that the sac itself was formed almost entirely by the contiguous cellular substance of the inguinal and iliac regions; and that the trunk of the anterior crural nerve passed along the iliac margin of the cavity of the sac, contributing to its surface interiorly. The profunda artery arose at or near the aneurismal orifice; the precise point I did not ascertain, but I believe very close to its upper end; we may, therefore, conclude that the retrograde hæmorrhage came from the anastomosing of its branches with those of the internal iliac artery, and also from the epigastric and circumflex iliac, judging from the incidents of the operation.

Appearances having no immediate dependence on the disease, were a heart hypertrophied with some thickening of the valves of the left side, an enlargement of aorta, and a small black vegetation immediately below the valves of the aorta. Two ounces of water in pericardium. Lungs of both sides adhered to parietes of chest from an ancient pleurisy, affecting their entire periphery. The lungs were somewhat congested with blood.

The abdominal viscera were examined superficially, and were in good order, with no peritoneal inflammation. I observed, however, an anomalous sac, such as I had never met with before; it was a spherical pouch of peritoneum of the capacity of a quart, situated in the right iliac fossa, under the head of the colon, which it had lifted out of its place almost into the lumbar region. This pouch was in fact an internal hernial sac, a pocket formed exclusively of peritoneum like a diverticulum from this membrane, and contained the lower half of the small intestinal canal; it resembled precisely a large bladder filled with intestines, having its orifice of a reduced size, but not so much so as to threaten strangulation. Its parietes were so transparent, that the first impression was that of an ancient peritoneal adhesion of the small intestines. There was no point in the parietes of the abdomen where this preternatural sac seemed to have at any period protruded, it was, therefore, a pure peritoneal hernia occupying the iliac region, and furnishing no external indication of its existence.

In the above narrative, we have a third example occurring within the space of a year, under the observation of one individual, where it was absolutely necessary to apply one ligature above the aneurism and another below it, to arrest the hæmorrhage, and this last a case of simple aneurism.—*American Journal of Medical Sciences*, October, 1842.

PLANTS AND ANIMALS.

Animals (says Liebig) are distinguished from plants by their capability of moving from place to place, by their sensations and sensibility, or, in one word, by their senses, for all these purposes certain organs are required, which are entirely wanting in plants. The same active principle, however, gives to the bud, the leaves, and the fibres of the root, the same wonderful properties. The plant is alive as truly as any part of the living animal body. They both receive on the same principle, the properties of growth, reproduction, and the power of replacing in the system what has been consumed. Of these properties vegetable life consists, it is developed without consciousness.

RETROSPECT OF THE MEDICAL SCIENCES.

POISONING BY CANTHARIDES.

The "*Annales d'Hygiène Publique*" for October contain a very lengthy and verbose communication from Dr. Ythier Poumet, of Orleans, detailing a series of medico-legal experiments on poisoning by cantharides, carried on with the more especial object of detecting the poison by examination of the body after death, either previous to or after inhumation. He administered the fly in substance, in powder, and in the form of blistering plaster, to the animals which were the subject of his researches. The dose of the fly in substance varied from two to three scruples, of the powder from one to five scruples, of the plaster the average dose was twelve scruples, containing about two and a half of the powder. In the plaster used, the cantharides formed rather more than one-fifth part of its composition. The poison was in every instance mingled with some article of food—such as lard, sausage meat, boiled beef, pastry, &c. In several instances the animals experimented on were kept without food for thirty, forty-eight, and fifty-two hours previously; others were fed a few hours prior to the administration of the poison. In no case was the œsophagus tied, Dr. Poumet being desirous that the cases of poisoning resulting from his experiments should resemble those where the cantharides is given with a criminal object as much as possible.

The physical characters of the cantharides has been referred to by Fodéré, as constituting the best proof of poisoning by its ingestion, but Dr. Poumet observes that he has searched for these signs at least twenty times on the internal surface of the intestine blown out and turned inside out, or incised and laid open, but not desiccated, and in vain. Under these circumstances, he determined to spread out in very thin layers on plates of glass the vomited matters, the contents of the alimentary canal, and the fæces, and to dry them without further preparation. The canal itself, having first been drawn out vertically, and stretched by a weight attached to its lower extremity, so as to efface its curves, convexities, &c., was blown out and dried, and then cut into pieces about the size of a playing card each. If there are any portions of the powder present, they will then be readily discovered either with the naked eye or a magnifying glass. Unless the glasses on which the suspected matters are spread are examined by sunlight, the experimentalist will not be justified in declaring that there are not any traces of the poison to be discovered. The intestinal matters which contain the largest quantity of cantharides are, in the first place, those contained in the great intestine and the fæces passed during life, next the mucus contained in the small intestines, and thirdly that of the stomach. The same order obtains with respect to the different portions of the desiccated alimentary canal.

Dr. Poumet recommends that, in addition to the research after the physical characters of the cantharides, a chemical analysis for a metallic poison should be had recourse to in every instance, as it is perfectly possible that a double case of poisoning by the fly and either arsenic or corrosive sublimate may have been effected, and the latter part of the crime escape notice

from want of the necessary analysis. He adds as a reason that the criminal might escape from justice in a case of poisoning from cantharides only, by the plea of love, which would not be admitted if the double crime had been perpetrated. Such an excuse would scarcely be listened to in an English court of justice. Besides, the performance of the chemical analysis recommended has this further advantage, by establishing the proof that death has not been caused by any metallic poison, of increasing the number and value of the presumptive evidence of poisoning by lytta.

There are certain other insects of the coleoptera, which, taken in powder internally, would present appearances that might be mistaken for the pulvis cantharidis; but they, with scarcely an exception, differ in a toxicological point of view, not being either vesicant or poisonous, besides which they are not kept by any druggist, so that in order to their administration, they must be collected, dried, and powdered by the person wishing to use them, a degree of trouble which would scarcely be taken by any one, unless they were looked upon in the light of cantharides, in the which case they would not effect the object proposed, nor would any symptoms of poisoning ensue. In order that a mistake of this kind should take place, it would require that the criminal should give an insect altogether harmless, instead of one eminently fatal, to a person laboring under a severe acute disease of the alimentary canal, suddenly occurring without any appreciable cause, and accompanied with the symptoms indicative of disorder of the urinary organs, a concatenation of circumstances very rarely if ever to be met with.

If the insect has been administered entire, and passes so, or is found in that condition, no doubt can then be entertained as to the nature of the cause of death, nor should any reasonable hesitation be experienced if the insect be so coarsely powdered that an entomologist can discover and point out some of the characteristic indications proper to this insect.

Dr. Poumet did not discover any morbid alterations worthy of notice in any of the animals upon which he operated, although he carefully examined all the organs. The gangrene of the penis, so generally met with in man, did not occur in any instance.

It is difficult to decide in what dose cantharides produce death in man. Batt mentions a case in which ten grains caused most severe symptoms, and Amoreux lost a patient who took only a little pinch, while Fodéré mentions the case of a consumptive patient, who, after having swallowed about a tablespoonful of the same powder (two ounces) was affected only with heat of the throat and ardor urinae; A number of inevitable, unforeseen circumstances vary the degree of noxiousness, of fatality of two equal quantities, or even of a larger dose; the cantharides in the one case may have been taken whole, in the other in powder, or the powder may be old and changed in its properties, or fresh and full of power; one person may have taken it fasting, another during or after a copious meal; sometimes a large quantity is vomited, more frequently the whole is retained, and finally the nature and quantity of the menstruum em-

ployed, the length of time which has elapsed between the ingestion of the poison and the administration of remedies, all tend to modify considerably, or destroy altogether, the *methodus agendi* of these coleopterous insects. These differences, which have been remarked in man, occur also in animals poisoned expressly, although with them it is almost possible to have everything as equal and correct as it should be.

Dr. Poumet deems himself entitled to draw the following conclusions from his experiments:—1st, The presence of cantharides administered internally, either entire or in fine powder, may be demonstrated in the vomited matters, in the *feces* passed during life, in the mucus of the *œsophagus*, in the contents of the stomach, small and large intestines, in the matters found on the margin of the anus, and on the internal surface of the insufflated, stretched, and desiccated alimentary canal.

2ndly, The traces of the poison may be discovered and recognised not only 24 or 38 hours after death, in 72, 93, or 95 hours, 8 or 26 days after its ingestion, but even 15, 29, 200, or 210 days after inhumation.

And 3dly, the shining particles of the Spanish fly cannot be mistaken for red or copper filings.

CASE OF GUNSHOT WOUND.

A somewhat interesting case of gunshot wound, involving serious consequences to the facial nerves, is recorded in the "*American Journal of the Medical Sciences*" by Dr. Peebles, of Petersburg, V. A. He was called in August, 1840, to a middle-aged man of intemperate habits, who, in a fit of jealousy, had shot himself with a fowling-piece loaded with duck-shot. On examination, an entire wedge of the inferior maxillary bone, about an inch in length, was found to have been broken away, involving the loss of the two lower molar teeth, the bone not being either shattered or splintered; there was also a transverse fracture at the symphysis, and the tongue was torn across, all the free portion of it with the attaching *frœnum* being completely severed, and thrown forwards between the front teeth. The charge passed through the antrum about three quarters of an inch below the eye, carrying with it also the two cuspidati and their alveolar processes. The hæmorrhage was frightful, but was controlled by rest in the recumbent posture, cold applications to the head and face, and finally by the use of pledgets of lint soaked in a solution of creosote applied directly to the bleeding surface.

The portion of the inferior maxillary which had been broken away fell inwards, protruding the teeth into the mouth, and lying so loose and detached as almost to induce the surgeon to remove it. It was, however, replaced, and kept in situ as well as could be effected. The second day the mouth, particularly the lower portion, was drawn to the left side, and there was loss of sensation in the right side of the lower lip; the end of the tongue was retracted and swollen, so as considerably to impede deglutition, and the left antrum was exposed. The external wound presented the form of a triangular incision, with a perfect flap, which was completely readjusted, and secured by plaster. Alarming hæmorrhage continued to recur occasionally for ten days, but was always arrested by the means previously employed. The wound of the antrum healed by the end of the second week, the tongue was also well, and the right cheek

was granulating healthily. The chief source of irritation now was the loose piece of bone, which could not be kept in situ for a sufficient length of time to induce reunion; six weeks elapsed before it united at the symphysis, and then all went on well, and the cure was completed at the end of the fourth or fifth month. He then presented the following appearances:—the inferior maxillary bone was somewhat shortened, but perfect and sufficiently strong for the purposes of mastication; the remainder portion of the tongue was atrophied to a mere membrane, useless in speech or mastication, and remaining motionless on the floor of the mouth. It had well-developed papillæ, and the taste was unimpaired. Deglutition was perfect. The mouth was still partially drawn to the left side, and the muscles of the right cheek were paralysed. Sensation returned to the lip soon after union had begun at the fracture near the symphysis, proving, Dr. Peebles thinks, that the paralysis which occasioned the loss of sensation, was owing to the pressure exerted by the displacement of bone on the branch of the third division of the fifth pair of nerves, which emerges from the anterior mental foramen to be distributed on the lip. The paralysis of the cheek appeared to depend on injury of the lowest branch of the *portio dura*, and a portion of the motor branch of the fifth pair.

RUPTURE OF THE PENIS.

A thin healthy man, twenty-seven years of age, while in coitu and just before the orgasm, felt something give way in the penis. Dr. Jarvis, of Louisville, Kentucky, who was summoned to him, found the organ very much distended with venous blood along the dorsum and left side and around the prepuce; the swelling encircled the whole body of the penis at its root and at the prepuce; at the latter place the distention of the integuments was greater than in any other part. There was neither pain nor tenderness, nor difficulty in micturition. By the assiduous use of cold lotions and rest in the recumbent position, the further effusion of blood was arrested, and that already poured out induced to coagulate. Dr. Jarvis then made a free incision longitudinally along the dorsum, and transversely through the prepuce on the left side, and directed hot applications to favor the discharge of the blood. Two more incisions were practised on the left side of the prepuce, and the blood that remained afterwards was left to the absorbents to remove. The swelling gradually diminished, and towards the end of February the penis was reduced to its natural size, and all discoloration gone, but on erection the penis was curved and drawn down to one side, attended with considerable pain. When not erect, there was felt a hard substance at the part where the rupture took place. The patient improved somewhat in these respects during the summer, but the *chordee*, local tenderness, and slight swelling and hardness at the point of rupture had not entirely disappeared in September, 1841, when he died of fever.

Three years previously to this accident the patient had worn a very tight pair of pantaloons, the middle seam of which pressed so closely upon the left side of the penis, where it curved to lie upon the opposite thigh, as to cause much pain and tenderness at that spot, especially at the time of erection. These symp-

toms and a local weakness never left him. It was precisely at this spot that the rupture of the sheath of the corpus cavernosum appeared to be, and on this point alone was any tenderness felt on pressure.—*Amer. Journ. Med. Sci.*, July, 1842.

PROCIDENTIA UTERI.

Dr. Sutton, of Georgetown, Kentucky, was called on the 16th of November, 1823, to a Mrs. S., who was said to be in labor. She was attended by a midwife, by whom she had been delivered of a child, and who assured the doctor her patient had not a worse time than common; the placenta came away in good time, and without difficulty, and the tumor followed it closely. The patient had a ghastly aspect, lips blueish, pupils dilated, pulse very weak, and yet there had not been much hæmorrhage. Dr. Sutton endeavoured to replace the uterus, but failed in doing so. His patient died in three hours. He does not give any account of the appearances after death.

On the 19th of October, 1835, he was called to another case, in which, after the birth of the child, procidencia uteri occurred, the placenta partially adhering; there was not any hæmorrhage, but great prostration, the lips and countenance livid, and the pulse scarcely perceptible. Dr. Sutton sent immediately for further assistance, then separated the placenta, and returned the uterus. Symptoms of uterine irritation with threatenings of puerperal hysteritis afterwards set in, but were removed by appropriate treatment. The patient continued delicate for some time afterwards.—*Ibid.*

ABSCESS OF THE BRAIN.

In the "Archives Générales de Médecine," a case of abscess of the right lobe of the brain is published, involving some interesting and important facts. A girl, a servant at a public-house, in a struggle with some drunkards, received a blow from a bottle on the lateral and upper part of the forehead, which caused a large and very contused wound, exposing the bone. She was admitted into the hospital on the 9th of December, 1841, under the care of M. Blandin, and on the 13th of January, after the separation of several sequestra, the wound had cicatrised. The cure, however, was only apparent; a local pain remained, which increased in severity, causing the patient to scream loudly and prevented her moving her head. Vomiting and insomnia followed, but the intellect remained clear, and also all the other faculties. The pulse continued regular, but the patient gradually getting worse, and her general health evidently suffering much, M. Blandin, *en désespoir de cause*, proceeded to trephine, thinking the irritation might be caused by a sequestrum or a purulent effusion. A piece of the cranium about an inch in diameter was accordingly removed, but no fracture was discovered; the parts beneath, however, presented an equivocal feeling of elasticity to the finger. Under these circumstances, M. Blandin determined to wait, in the hope that the abscess, if there was one, would open spontaneously, but after the lapse of some time, no such result ensuing, an exploratory puncture was made with care, but without any advantage. For a time, after these operations, the poor girl seemed to be relieved, but the pain soon became more severe, and emaciation and prostration, followed by a severe attack of erysipelas, ushered in death. The opening made

in the cranium by the trephine had not closed, and the dura mater was intact. On passing in the finger after death, the same elastic feeling was perceived as during life, and on examination, it was found to correspond to a large circumscribed encysted abscess in the right lobe, separated from the dura mater by a thick layer of cerebral substance. It is clear that if M. Blandin had incised this layer, the abscess would have been discharged, and the patient had a chance for life.

M. Aran, the reporter of the case, in his remarks upon it, draws attention to the great neglect with which the trephine is now treated, and although far from an advocate for its general use, he equally condemns its total abandonment; he also thinks that in serious cases, such as that under notice, the surgeon not deriving benefit from the treatment, should not hesitate to plunge a narrow bladed bistoury into the brain itself, and to some depth if required.

FOREIGN SUBSTANCE IN THE EYE.

An interesting case of a singular character has occurred in the practice of M. de Castelnau, who has published the details in the *Archives Générales de Médecine* for October last. The foreman of the iron works at the Versailles railway, a man about thirty years of age, was wounded in the right eye on the 29th of June, 1838, by a piece of steel on which the men were at work, and which had been struck off by a heavy hammer. All the symptoms of a foreign body in the eye were immediately manifested, accompanied by severe pain and instantaneous loss of vision. M. Sichel, whom he consulted, found a perforation of the cornea, but could not discover the piece of steel; he concluded therefore that it had been removed, and directed all his attention to the prevention of inflammatory symptoms, at the same time warning his patient, that he must not hope for the restoration of vision. The treatment pursued was sufficiently energetic, but the pain continued very severe, accompanied by an effusion of the aqueous humor, which excoriated the cheek. The wound of the cornea not having been cicatrised at the end of a month, the patient consulted M. Carron du Villards, under whose care it healed in a few days. All the severe symptoms were then gradually relieved, and the man could resume his avocations, but the vision of the injured eye which at first enabled him to distinguish light from darkness, gradually diminished, and was finally quite lost about eighteen months after the accident.

Three years and a half had elapsed when he was seen by M. de Castelnau; he was then suffering from pains in the eye, which were at first dull and slight, but gradually became so severe as at times to prevent his sleeping; the conjunctiva was rather red, and the centre of the cornea presented a peculiar conoid appearance, which at once attracted de Castelnau's attention, and induced him to ask whether the eye had been struck by a foreign body. He then learned the preceding facts, and was informed that from the appearance of the block of steel whence had been chipped the piece, it must have been of comparatively large size, unless it had been broken into small pieces. The cornea was quite opaque, and the eye shrunk, as if it had lost some of its contents.

A few days afterwards, the pain and inflammation

having much increased, a little solid angle was seen projecting at the top of the cone of the cornea, which, by its hardness, was ascertained to be metallic. This was removed a few days afterwards, the operator finding his chief difficulty from the adhesions formed by the posterior part of the steel with the interior organisation of the eye. The operation lasted six or seven minutes, and was not very painful. There was not any attack of fever, nor increase of pain afterwards; but, on the contrary, all the symptoms diminished in intensity, and soon after the man returned to his workshop.

The foreign body was a fragment of iron, having the shape of a regular triangular prism, two faces of which, being nearly equal, formed a right angle, and all its angles were exceedingly sharp; it weighed fifteen grains, and was six lines and a half long.

MIDDLESEX HOSPITAL.

The vacancy in the office of assistant-surgeon to this hospital has been filled by the election of Mr. de Morgan. The other candidates were Mr. Harrison and Mr. Erasmus Wilson.

PROMOTIONS AND APPOINTMENTS.

War-office, December 13.

17th Light Dragoons—Assistant-surgeon George Anderson, from the 75th Foot, to be assistant-surgeon, vice Cooper, deceased.

75th Foot—Robert Lewins, M.D., to be assistant-surgeon, vice Anderson, appointed to the 17th Dragoons.

NAVAL.

Surgeons—Dr. H. W. Mahon, to the Samarang; John Hateley, from the Frolic, to the Thunderbolt; John Rees, to the Frolic.

Assistant-surgeons—John S. Peddie, to the Victory; Arthur Adams, to the Samarang; R. Hastings, to the Thunderbolt; G. S. G. Bowen, to the Minden.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, December 9, 1842.

J. Robinson, B. A. Smith, P. P. Travers, R. Haynes, H. Adkins, T. G. Beall, G. Pycroft, T. Jones, E. Empson, T. G. Gurdon, H. J. Sanderson.

BOOKS RECEIVED.

The Physical Diagnosis of Diseases of the Lungs. By W. H. Walshe, M.D. London: Taylor and Walton, 1842. 8vo. pp. 308.

Photography, including the Daguerreotype, Calotype, Chrysotype, &c. Second Edition. By W. R.

Baxter, M.R.C.S. London: Renshaw, 1842. 8vo. pp. 24.

The Retrospective Address delivered at the Tenth Anniversary Meeting of the Provincial Medical and Surgical Association. By James Black, M.D. Worcester: Deighton and Co., 1842. 8vo. pp. 146.

Chemical Manipulation; being Instructions to Students in Chemistry on the Methods of Performing Experiments of Demonstration or Research with Accuracy and Success. By Michael Faraday. Third Edition. London: Murray, 1842. 8vo. pp. 664.

Mémoire sur l'emploi des caustiques dans quelques maladies de l'urètre. Par le Dr. Civiale. Paris: Renouard, 1842. 8vo. pp. 58.

Mémoire sur l'anatomie pathologique des rétrécissements de l'urètre. Par le Dr. Civiale. Paris, 1842. 8vo. pp. 74.

LITERARY INTELLIGENCE.

Preparing for publication early in the next year, Principles of Forensic Medicine. By William Augustus Guy, M.B., Cantab, Professor of Forensic Medicine in King's College, London, and Physician to the King's College Hospital.

ERRATUM.

In Mr. Estlin's paper on Cataract and Prussic Acid, in the last Number, at page 209, 2nd column, 21st line from bottom, for "tumor," read *humor*.

Gentlemen desirous of having the "*Provincial Medical Journal*," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

Zeno.—We have seen the account of the dispute between Dr. Marshall Hall and his new patrons. It grieves us to think that a love of notoriety should have placed Dr. Hall in so unenviable a position. He had far better remained content with the patronage of the "*Lancet*."

A Student (Newcastle-on-Tyne).—We have received a letter from a student of this school, complaining of a transaction which, we trust, has been arranged ere this.

A. F.—We should only gratify an idle curiosity by revealing the secret proceedings at the Westminster Hospital. If the appointment of physician be made for one year only, it becomes a question whether such practice may not become a custom, and the office be sold annually to the highest bidder.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET,
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COURSE OF CLINICAL LECTURES, DELIVERED AT THE MIDDLESEX HOSPITAL. BY DR. WATSON.

Lecture IX.—December 10, 1842.

GENTLEMEN,—I have this day to address myself to a case which has terminated fatally, in the person of a boy who lay in Pepy's ward, as you remember, in a very distressing condition. This boy, named John Windsor, twelve years old, was admitted on the 22nd of November. He then looked pale and very ill; his features were pinched and expressive of great suffering; his tongue dry; his lips and teeth black with sordes; his pulse so high as 124; he complained of being in pain "everywhere," and lay with his lower limbs flexed towards the trunk; pressure on the abdomen increased his pain; he had cough, also, and pain in the precordial region.

It was stated by his brother, that a fortnight before he had been attacked with flushes of heat; shivering and pains in his bones; and a week before his admission the pain in his abdomen began; his bowels had been much relaxed, the stools were reported to have been very unnatural, of a greenish color; his urine was plentiful but high colored; he had been somewhat delirious for several days, and especially so for several nights.

After his admission you saw him; his tongue became and remained clean, and he answered questions rationally, though always in a very complaining manner, and with a pitiful aspect, as though he was in much agony. It was soon found that his left hip was swelled a little, and there was some fulness and tenderness in the right loin. He could not attempt to extend his legs without appearing to suffer greatly; the hip and the back were excessively tender; indeed, wherever he was touched he called out that he was hurt—whether the pressure, however slight, was made on the shoulders, the abdomen, the hips, or the limbs generally.

At its first aspect, this case looked like a case of continued fever simply; but it soon became plain that he was laboring under a still more serious disorder. You may remember my having observed to you, more than once, that the poor boy must die, and that probably we should discover suppuration and extensive mischief in various parts of his body, and especially in his joints. Nothing administered did him any good; no treatment afforded him relief. For a short time, indeed, his bowels were improved in condition, but that amendment was temporary, and very transient. He gradually became weaker; incontrollable diarrhoea set in; his pulse rose to 140; and on the 7th inst. he expired.

On the next day his body was examined. Here is Mr. Anthony's report of the examination, which I shall read:—

Head.—The sinuses and veins of the pia mater were distended with blood, but there was no serous effusion into the ventricles, or elsewhere; the cavity of the internal ear on both sides was examined, but nothing unnatural observed.

Thorax.—Upon the removal of the sternum, a quantity of pus gushed from the left pleura. Lymph was deposited in patches upon the pleura, covering the lower lobe of each lung; the pericardium was distended with a large quantity of clear serum; and on the surface of the heart were some granular deposits of coagulable lymph; the inner surface of the heart was nearly, or perhaps quite, healthy.

Abdomen.—The viscera and intestines were healthy, but when the left mesocolon was raised, and turned back towards the right side, a large bag of matter came into view between the peritoneum and the fascia transversalis. This communicated with similar purulent collections in the pelvis, alongside the rectum.

Spine.—The spinal cavity was laid open from behind, and in its whole length the theca was separated from the medulla by pus.

Joints.—Both hip-joints were full of pus; so was the right shoulder; there were abscesses in the cellular tissue near each wrist; the knee-joints were free from pus.

The Veins were carefully examined—the larger veins nearly all of them; in a portion of the left axillary were some slight traces of inflammatory action, and two of the communicating veins were blocked up by fibrin. The cellular tissue about the insteps and ancles was oedematous. There were no collections of pus in the substance of the brain, lungs, or liver.

This has been a well marked instance of a very frightful and fatal malady; inflammation mostly, but not necessarily, going on to suppuration in various parts of the body, and produced (so we believe) by the mixture of pus, or of some other morbid product or morbid secretion, with the circulating blood. It is this malady which gives to many fatal injuries, and to many—nay, to most fatal operations, their mortal character. It is of surpassing importance, therefore, to the surgeon; it is the same malady which gives origin to so many fatal cases of puerperal fever; it is, therefore, of the deepest interest to the accoucheur; it is scarcely of less interest to the physician.

These scattered inflammations—these collections of pus, disseminated through the body—occupying here and there the liver, the lungs, the brain, the cellular tissue, the muscles, the serous cavities, the joints—can scarcely be accounted for, but on the supposition that the blood, which reaches all those parts, is vitiated. It is unlikely, in the highest degree, that in-

inflammation should simultaneously occur in so many separate and distant spots without some such link of connection. Pathologists, Cruveilhier especially, have experimented on this subject; they have injected pus into the veins of living animals, and found in their dead carcasses just such appearances as this boy's body presents; and they have observed in those animals symptoms, before death, very similar to those which human patients, laboring under this malady, display.

It was long a familiar fact that fractures of the skull, which proved fatal, were frequently accompanied by circumscribed abscesses in the liver. And whimsical explanations of this fact were given; how there was some occult sympathy between the brain and the liver; or how the liver was jarred and hurt by the accident whereby the skull had been broken. Its true explanation was reserved for modern times; it arises from the introduction of pus into the blood. To the same causes are to be ascribed the abscesses and internal inflammation, which follow certain cases of amputation; and not of amputation merely, but of operations which seem less perilous, such as putting a ligature on a varicose vein; trying a hæmorrhoidal tumor; simple venesection; nay, a patient of mine, in this hospital, some years ago, lost his life in consequence of the supervention of the malady I am speaking of, after the excision of some spongy irritable little growths about the orifice of her urethra, by the late Dr. Ley.

In those latter instances there was no pus, you may say, to enter the blood; no primary suppuration; none, at least, that was obvious. True, there was none, until the dead body was inspected; and then, in such cases as these, inflammation of a vein or veins, phlebitis, has been discovered—phlebitis which had passed into the suppurative stage.

It was at one time a subject of debate, whether those collections of pus were the result of inflammation of the texture in which they are found—or whether they were simply deposits of pus, the pus having been carried in substance, and entangled or somehow laid down in those spots. This last was a very extravagant conjecture. It was suggested, I fancy, chiefly by the circumstance that the collections of pus sometimes form without the occurrence of any of the ordinary symptoms of inflammation of the affected tissues. Sometimes, I say, but not always, the inflammation is latent. In this boy it was attended with a remarkable degree of pain.

But there are some difficulties attending this theory, and objections may be made, which you should be prepared to obviate. Pus—it will be said, and very truly said—pus is, in innumerable instances, absorbed into the blood without any such formidable consequences. We see great abscesses disappear, and yet no other smaller, disseminated abscesses ensue. Does not this invalidate the alleged cause of such disseminated abscesses? No; it seems that for their production pus, as such, pus in substance, pus in the mass, must be received into the veins, into the circulating torrent. Pus that is taken up by absorption has not this destructive and fatal effect; it is altered, probably, by that process.

How, then, does pus get into the circulation in consequence of an amputation? Is it not absorbed from the suppurative stump? No, I believe not. If

the amputating knife crossed and sunk into a suppurating spot—if a vein had been divided—pus might have been sucked into the vein, and the usual effects follow. But the veins leading to, or rather from, a stump become blocked up by adhesive inflammation, and impervious, before the stump has had time to suppurate. How, then, does the pus find admission? Why, it is a product, in this case also, of phlebitis; the interior of the vein inflames, and goes on to supuration, and the pus which it pours forth mingles, as pus, with the circulating stream.

But other objections and difficulties present themselves. Cases of manifest phlebitis occur, without any disseminated abscesses or points of inflammation. Yes, there are two forms, or stages, or varieties of phlebitis—the adhesive and the suppurative. The blood contained in the inflamed vein coagulates and adheres to the walls of the vessel, and blocks it up—obliterates its cavity. If the vein be a small one, no great harm is done. If it be a large one—if it be the principal venous trunk of a limb, for example—its obliteration is followed by oedema of that limb. The blood cannot return freely, until the circulation through the affected vein is restored, or until a collateral venous circulation is established. This is, you know, the pathology of what is called phlegmasia dolens—so common after parturition, and whenever the femoral vein is sealed up, or greatly obstructed by the effect of adhesive inflammation, whether in males or females.

But in other cases the adhesive inflammation is succeeded by the suppurative. Sometimes pus may form harmlessly even in a large vein—namely, when the suppurating part is bounded and shut up at each end by another part in which the adhesive inflammation has prevailed; but whenever the pus finds its way into the general current of the blood, then these purulent collections are apt to occur, and the life of the patient is in imminent jeopardy.

You may, however, be told, that the veins have been diligently traced in some of those fatal cases, and that no vestige of suppuration, or even of inflammation has been found in them. To make this objection valid, all the veins should be scrutinised throughout the body; and that, I may venture to say, has never been done. In the case before us, Mr. Anthony searched long before he found any portion of inflamed vein; but he found it at last, slight yet distinct, in the left axillary vein. So in a terrible case which occurred in the summer to one of the students here—a case, as I understand, very similar to that of my little patient—only an inch or two of one vein, the jugular, was found to exhibit obvious traces of recent inflammation. But if none had been found in the more obvious veins, this would not satisfy me that there had been no phlebitis. The veins of the bones are often, I believe, the seat of the primary mischief, the fountain from which the pus, which thus renders the blood a poison, first proceeds; the veins of the skull, of the diploe, when disseminated abscesses ensue upon injuries of the head; the veins of the bones of the extremities after unsuccessful operations; nay, the evidence of the venous inflammation may have disappeared. Mr. Arnott has at this time a very interesting case in the house, which he permits me to mention, and which most of you probably have seen.

He had occasion to amputate a man's arm. Two or three days after the operation, the patient's pulse began to quicken; shiverings, I believe, happened, and Mr. Arnott became very apprehensive that phlebitis was taking place, and, watching narrowly for it, he soon found it. The veins of the arm, the large superficial visible veins, became swollen, hard, tender. In no long time an abscess formed in the other arm, near the elbow joint, I think; then a great abscess in the back. The man is apparently recovering from these cross complications; and the case is excessively interesting, inasmuch as it shows (or will show, I hope), that this formidable malady, suppurative phlebitis, even when it gives rise to consecutive inflammation and suppuration here and there, is not necessarily fatal; though it is so, unfortunately, in a very large majority of instances. Now in this instance treatment was applied to the inflamed veins of the arm, and the inflammation has subsided and ceased, and all outward evidence at least of its existence has disappeared, and probably all inward evidence too; so that, were this man to die, his venous system might probably be searched in vain for any remaining traces of phlebitis—and yet we know that he has had phlebitis.

I believe, then, with Mr. Arnott, and with M. Cruveilhier, that the essence of this frightful malady is phlebitis; and that is the compendious name which we may now give it—"suppurative phlebitis." I have seen two or three instances in which it has occurred in persons who had had deafness and a chronic purulent discharge from the ear, chronic otitis. Here, no doubt, the veins of the bones of the skull, or of its membranes, became involved at last in the disease of the petrous portion of the temporal bone. I mention this, to account for the particular notice of that bone in the report of the dissection. The purulent deposits themselves are caused, it is believed, by inflammation going on to suppuration of the venous capillaries of the part.

The object of our treatment, when the phlebitis is obvious and superficial, is to subdue and resolve it, or, at any rate, to prevent its passing beyond the adhesive stage. This we do by keeping the patient at rest, by applying leeches and lotions, or fomentations to the neighbourhood of the inflamed vein, and by prescribing an abstinent and regulated diet. There seems to be sometimes a sort of epidemic tendency to the occurrence of phlebitis, either depending upon some existing condition of the atmosphere, or upon some peculiar state of the human body, brought about by antecedent influences. The same external circumstances that predispose to erysipelas and to hospital gangrene, predispose too, I fancy, to phlebitis, and to phlebitis of the suppurative variety. When a person is laboring under the disease, it is probably unsafe to open a large vein, lest by that slight injury we should establish a fresh local phlebitis. Indeed, after the suppurative form has once been set up, general bloodletting does no good, but diminishes the power of the system at large to struggle against the disease.

Sometimes suppurative phlebitis is attended in its course with repeated rigor, and with profuse perspirations, and (as in our patient's case) with copious and unnatural discharges from the bowels. These have

been noticed in animals soon after the introduction of pus into their veins. Nature attempts, apparently, thus to eliminate the poison; and where the quantity of pus so introduced has been small, the attempt is now and then successful. But in general there is a continual supply of the noxious substance, and the system is irrecoverably infected. In all cases great agitation and a marked disturbance of the nervous system occur.

This is a subject of the greatest interest and highest importance to the surgeon, the accoucheur, and the general practitioner. To its consideration I therefore strongly urge you. If I did not suppose that most of you may have already heard, in his lectures and clinical observations, Mr. Arnott's matured experience and sentiments upon this subject, I should recommend you to read his excellent paper upon phlebitis in the *Medico-Chirurgical Transactions*.

CLINICAL LECTURES

DELIVERED AT THE

METROPOLITAN FREE HOSPITAL.

BY MR. BENNETT LUCAS,

Senior Surgeon to the Institution, and one of the Lecturers on Anatomy and Physiology at the Westminster Hospital School of Medicine.

Lecture II.—Dec. 2, 1842.

GENTLEMEN,—At the conclusion of the last lecture I directed your attention to some cases of interest, which were under treatment at the time. I shall occupy a few moments in stating to you their issue.

The man from whom I removed a large portion of his left scrotum, for the relief of some distressing symptoms he suffered in connection with varicocele of that side, remains free from them. The parts are now perfectly healed, the scrotum of the affected side is not half as large as the opposite one; the testicle and the varicose veins, which can be distinctly felt at the inner and back part of the scrotum, are kept permanently and effectually supported; and, if even no amendment takes place in the varicocele from the operation, the amount of benefit he has received from it fully compensates him for the pain and inconvenience he suffered from its performance. The patient who was affected with encysted hydrocele of the chord continues free from any return of the tumor; the little hardness, or rather thickness, of the cellular tissue of the chord is gradually disappearing.

The girl who was operated upon for divergent strabismus has not since applied here, which makes me suppose the satisfactory result of the operation continues. It may be, however, that she has been "kidnapped" on the pretence of doing more for her, as this system of practice has not as yet altogether subsided.

A patient, named Charles Johnson, aged thirty, has been in attendance for the last eight weeks with necrosis of the lower jaw. He had been the inmate of another hospital before he applied here, and had a portion of bone, corresponding to the right horizontal ramus of the jaw, removed. The history he gave of his case is as follows. He had been an equestrian performer as clown, in which vocation he led a very free and irregular life. He had venereal three times, both sores and buboes. Eighteen months ago he had a

swelling of the right side of the lower jaw, for which he had a tooth removed; the swelling continued to increase; it was hard, and took the course of the jaw, accompanied with an aching pain; after a short time the swelling broke into the mouth, and discharged fetid yellow matter. Two months after this an incision was made over the jaw upon its outer side, and a piece of bone, about a finger's length, was removed. He was discharged in a short time after, a small fistulous opening in the integuments remaining. In a few days his jaw again swelled, and an abscess formed, which was opened, and a second piece of bone was discovered, which corresponded to the perpendicular ramus of the jaw; in consequence of his refusing to have this removed, he was, most properly, dismissed, and he then applied here. All that we did for him was to apply simple dressings and poultices to the jaw, and to give him an occasional aperient. It was proposed to him more than once that I should remove the dead bone, but this he strongly resisted, until, in the end, nature accomplished it—slowly, it is true, but effectually, and with scarcely any suffering to the patient. At one period there were three ulcers in the soft parts covering the upper portion of the jaw; these gradually ran into each other until one large opening was thus formed, through which, eventually, the sequestrum was discharged.

As this is a very instructive case I shall make a few remarks upon it. In it you have an entire history of one of the most interesting and important diseases in surgery, and, moreover, attacking a bone which differs in so many respects from the other bones of the body; unique as the lower jaw is in its shape and its twofold articulations, having connected so intimately with it the teeth and their alveoli, affording attachments for numerous and powerful muscles, and for that peculiar structure called "the gum;" and in its functions performing the essential offices it does in mastication, in deglutition, and in speech. Whether, in addition to the venereal affections which this patient labored under on three several occasions, and the mercury he had taken for their cure, the hardships he endured as a third-rate clown in a circus, together with the continued daubing of his face with deleterious compositions, had any effect in producing the disease, is an interesting question; at all events it is certain that Grimaldi the celebrated clown suffered from the same disease, and I am myself inclined to think that in this case the constant application of paint containing lead to the soft parts covering a bone so superficially placed as the lower jaw, added to the heat and perspiration of the parts excited by the performances of the individual, had much to do in giving rise to the disease. The age of the patient is thirty. It is seldom we have necrosis occurring so late in life, except when it takes place in the lower jaw. The disease usually takes place between the ages of ten and twenty, and attacks the long bones, such as the tibia, the ulna, and so on. I had occasion here, about two years ago, to remove the protruded middle phalanx of the thumb of a young workgirl for this disease; she occasionally calls here, and the last time I saw her she had as perfect a thumb on one hand as she had on the other. When Johnson applied here the disease was very far advanced; the new bone which surrounded the sequestrum was much larger than the

corresponding part of the opposite side, and was irregular to the feel; indeed, it so impeded the movements of the jaw that he could only open his mouth about one-fourth. When I pressed upon the new bone I did not give him pain, neither did the pressure force out much matter from the ulcerated openings; yet a little pus did appear when I pressed with my finger, but nothing approaching the quantity which flows under such circumstances, when the soft parts alone are affected. Now this is what takes place in necrosis, situated elsewhere, as, for instance, in the tibia, where we shall have several ulcerated openings taking the course of the diseased bone; in short, pointing it out to us, and discharging pus, the quantity of which is not increased by pressure as occurs in the soft parts, because in the case of a necrosis the new bone, upon which the force is applied, is sufficiently strong to resist it.

The appearance which the ulcerated openings presented, and the manner in which they ran into each other, merited your best attention. They were situated near to one another, and presented that peculiar appearance which at once indicated that they led to sinuses which communicated with dead bone; the openings had rounded edges, which were partially encroached upon by pale colored granulations; their orifices were not sensitive, but the moment I introduced a probe, and it passed into the sinuses, the patient complained of great pain, which was increased upon its reaching the sequestrum. Had I anticipated nature by cutting down upon the dead bone and removing it, there is little doubt but this man's cure would have been quicker than it has been, but I very much doubt if he would have had as slightly a countenance—a matter probably not of as much moment in this case as it would have been in an individual with greater pretensions to beauty; besides, nature was effecting her work well without giving him more than uneasiness, and prolonging the filthy state of the parts. When the constitution of a patient suffering under necrosis sympathises with the disease, and hectic fever sets in, severe operations are consequently called for to remove the dead bone; and, in necrosis of the tibia, for instance, the soft parts are even to be detached from the new bone, so that the curve of a small trephine might be applied, in order to make a large opening in it, to get at the sequestrum contained within, and remove it; after which being accomplished, the constitutional symptoms usually cease. In the case of this man, however, there was no indication for severe measures, as he appeared to enjoy perfect health all through. I have more than once seen patients with an inch or more of a necrosed tibia protruding through the soft parts, the exposed part black, as it generally in such cases is, walking about the country, and suffering merely from the local disease—so little does the constitution in many severe cases sympathise with this affection.

So long as a fistulous ulcer remains unhealed, the suspicion that a portion of sequestrum is not removed should always be entertained, although it is right you should be aware that fistulae will remain unhealed without there being any dead bone present. In the case before us it is highly probable that the ulcerated opening which remained, after the first piece of bone was removed, led to that portion which came away

subsequently. At all events, in any doubtful case a probe passed down to the bottom of the fistula will determine the matter. If no dead bone in such a case be detected, it will be our duty to endeavour to heal the fistulous ulcer by the use of stimulating injections and the other means we possess. There are but two more points, Gentlemen, in connection with this case to which I desire to draw your attention. The first is, that the alveolar processes and the teeth are perfectly sound, the only tooth absent in the lower jaw being that which was pulled out on the supposition that the disease on its first appearance was an alveolar abscess. These organs must, therefore, be now in connection with the new bone—an interesting example of what nature effects in such cases. The second is, the form and size of the sequestrum, which is evidently not the alveolar structure but that of the lower jaw. It is thin, broad, and of a brownish color; is light and porous, and gives no evidence of the existence of animal matter being in its composition. This patient's jaw is rough and irregular on the diseased side, and is larger than the opposite one. I say diseased side, because his cure cannot yet be said to be completed; upon the action of the absorbents must now depend the modelling of the new bone to its normal shape, and this, I need scarcely tell you, must be a work of some time.

In cases of necrosis of the lower jaw, it is not unusual for only one half the bone to be affected, and for that portion to come away in two distinct pieces, as occurred here. There is a preparation in our museum at the Westminster Hospital School of Medicine which exhibits this fact. The gentleman from whom it was taken is still living, and was formerly a patient of my respected colleague, Dr. Hunter. The horizontal ramus of the jaw in this case, also, was the first to come away, and in a few weeks after the perpendicular or ascending ramus soon followed.

The length of time, Gentlemen, which the observations I have made upon this interesting case have occupied, will only allow me to read to you the classification of the diseases to which I alluded in my former lecture; and I shall reserve the remarks I purposed making upon it until our next meeting.

GONORRHOEA.

Age.	Males.	Females.	Total.
10	1	0	1
11	0	1	1
12	3	0	3
13	2	4	6
14	4	4	8
15 to 20	634	102	736
21 to 25	694	65	759
26 to 30	330	20	350
31 to 35	111	6	117
36 to 40	67	6	73
41 to 50	46	24	70
52 to 54	9	3	12
55	2	0	2
57	2	0	2
58	2	0	2
59	2	0	2
60	0	2	2
67	1	0	1
70	2	0	2
1912	237	2149	

BALANITIS.

Age.	Number.
16 to 20	17
21	15
22	7
23 to 39	16
57	1

56

GLEET.

Age.	Males.	Females.	Total.
18 to 22	41	6	47
23 to 28	31	0	31
29	9	0	9
30	7	0	7
34	2	0	2
36 to 45	6	0	6
50	1	0	1
60	1	0	1
	89	6	95

CHANCRE IN URETHRA.

Age.	Number.
21	1
24	2
30	1
32	1
	5

STRICTURE.

Age.	Number.
18	1
20	2
21	1
22	2
23	6
24	2
25	3
27	7
28	6
30	6
32	2
34	4
35	3
36	1
38	1
39	2
40 to 50	26
51 to 68	7

82

FISTULA OF PENDULOUS URETHRA.

Age.	Number.
9	1
26	1
	2

FISTULA OF PERINEAL URETHRA.

Age.	Number.
62	1

GONORRHOEA AND SYPHILIS.

Age.	Males.	Females.	Total.
19	1	0	1
20	1	2	3
23	3	1	4
24	3	2	5
31	1	0	1
	9	5	14

WARTS.			
Age.	Males.	Females.	Total.
17	4	0	4
18	8	0	8
19	9	1	10
20	8	1	9
21 to 29	7	0	7
	36	2	38

ARTHRITIC URETHRITIS.

Age.	Number.
17	1
30	1
33	2
40 to 48	3
	7

INFLAMED PREPUCE AND VAGINA.

Age.	Prepuce.	Vagina.	Total.
1 Month	0	1	1
3 Months	0	1	1
5 Months	1	0	1
1 Year	1	0	1
2 Years	0	1	1
8 Years	1	0	1
10 Years	1	0	1
13 Years	0	1	1
15 Years	0	1	1
			9

GONORRHOEAL RHEUMATISM.

Males.	Number.
Age.	
19	1
21	3
22	2
27 to 30	4
	10

RETENTION OF URINE.

Males.	Number.
Age.	
28	1
31	1
32	1
34	1
	4

CONGENITAL DEFICIENCY OF URETHRA.

Males.	Number.
Age.	
20	1
40	1
48	1
	3

CONGENITAL PHYMOSIS.

Age.	Number.
16	1
38	1
	2

HERNIA HUMORALIS.

Age.	Number.
13	1
17	1
18	6
19	7
20	7
21	20
22	15
23 to 30	44
31 to 38	6
	107

TESTITIS FROM INJURY.

Age.	Number.
2	1
5	1
27	1
30	1
47	1
	5

TESTITIS WITH RHEUMATISM.

Age.	Number.
19	1
22	2
25	2
27 to 35	7
	12

HYDROCELE OF TUNICA VAGINALIS.

Age.	Number.
1½	1
2	3
3	2
25	4
26	4
28	6
32	3
34 to 40	3
	26

HYDROCELE OF SPERMATIC CHORD.

Age.	Number.
9 Months	2
1½ Year	1
2 Years	1
27 Years	1
30 Years	1
32 Years	1
46 Years	1
53 Years	1
	9

VENEREAL.

Age.	Males.	Females.	Total.
14	1	0	1
15	6	0	6
16	3	2	5
17	20	8	28
18	45	18	63
19	66	9	75
20	52	3	55
21	58	15	73
22	46	12	58
23	29	4	33
24	34	4	38
25	34	6	40
26	19	0	19
27	16	0	16
28 to 30	61	8	69
31	7	0	7
32 to 35	38	5	43
36	4	0	4
37	11	0	11
38 to 43	18	3	21
44 to 52	13	2	15
56	1	0	1
58	1	0	1
59	2	0	2
70	1	0	1
	586	99	685

SECONDARY VENEREAL.

Age.	Males.	Females.	Total.
1 Month . . .	2 . . .	0 . . .	2 . . .
6 Weeks . . .	4 . . .	1 . . .	5 . . .
2 Months . . .	6 . . .	2 . . .	8 . . .
5 Months . . .	2 . . .	1 . . .	3 . . .
6 Months . . .	1 . . .	1 . . .	2 . . .
7 Months . . .	2 . . .	0 . . .	2 . . .
9 Months . . .	1 . . .	0 . . .	1 . . .
10 Months . . .	2 . . .	0 . . .	2 . . .
1 Year . . .	3 . . .	0 . . .	3 . . .
2 Years . . .	1 . . .	0 . . .	1 . . .
16 . . .	0 . . .	2 . . .	2 . . .
17 . . .	2 . . .	0 . . .	2 . . .
18 to 29 . . .	104 . . .	34 . . .	138 . . .
30 to 34 . . .	14 . . .	0 . . .	14 . . .
35 to 40 . . .	17 . . .	7 . . .	24 . . .
41 to 50 . . .	10 . . .	0 . . .	10 . . .
54 . . .	1 . . .	1 . . .	2 . . .
56 . . .	2 . . .	1 . . .	3 . . .
	174 . . .	50 . . .	224 . . .

CONDYLOMATA.

Age.	Males.	Females.	Total.
6 Months . . .	1 . . .	0 . . .	1 . . .
10 Months . . .	1 . . .	0 . . .	1 . . .
1 Year . . .	1 . . .	0 . . .	1 . . .
17 Years . . .	1 . . .	2 . . .	3 . . .
18 . . .	3 . . .	2 . . .	5 . . .
19 . . .	0 . . .	1 . . .	1 . . .
20 to 36 . . .	15 . . .	0 . . .	15 . . .
	22 . . .	5 . . .	27 . . .

BUBO.

Age.	Males.	Females.	Total.
1 . . .	2 . . .	0 . . .	2 . . .
10 . . .	1 . . .	0 . . .	1 . . .
16 . . .	3 . . .	0 . . .	3 . . .
17 . . .	2 . . .	0 . . .	2 . . .
18 . . .	6 . . .	0 . . .	6 . . .
19 . . .	8 . . .	0 . . .	8 . . .
20 . . .	10 . . .	0 . . .	10 . . .
21 . . .	11 . . .	1 . . .	12 . . .
22 . . .	7 . . .	1 . . .	8 . . .
23 . . .	5 . . .	1 . . .	6 . . .
24 . . .	2 . . .	0 . . .	2 . . .
25 to 40 . . .	30 . . .	0 . . .	30 . . .
44 . . .	0 . . .	1 . . .	1 . . .
49 . . .	1 . . .	0 . . .	1 . . .
	88 . . .	4 . . .	92 . . .

NODES.

Age.	Males.	Females.	Total.
19 . . .	1 . . .	0 . . .	1 . . .
20 . . .	3 . . .	0 . . .	3 . . .
24 . . .	3 . . .	1 . . .	4 . . .
26 . . .	4 . . .	2 . . .	6 . . .
30 to 35 . . .	5 . . .	1 . . .	6 . . .
	16 . . .	4 . . .	20 . . .

VARICOCELE OPERATED UPON.

Age.	Number.
23 to 27 . . .	4 . . .

VARICOCELE NOT OPERATED UPON.

Age.	Number.
19 to 26 . . .	7 . . .

SUMMARY OF CASES FROM MAY 14, 1836, TO
AUGUST 25, 1842.

1. Gonorrhœa	2149
2. Balanitis	56
3. Gleet	95
4. Chancre in Urethra	5
5. Stricture of Urethra	82
6. Fistula of Pendulous Urethra	2
7. Fistula of Perineal Urethra	1
8. Gonorrhœa and Syphilis	14
9. Warts	38
10. Arthritic Urethritis	7
11. Inflamed Prepuce and Vagina	9
12. Gonorrhœal Rheumatism	10
13. Retention of Urine	4
14. Congenital Deficiency of Urethra	3
15. Congenital Phymosis	2
16. Hernia Humoralis	107
17. Testitis from Injury	5
18. Testitis with Rheumatism	12
19. Hydrocele of Tunica Vaginalis	26
20. Hydrocele of Spermatic Chord	9
21. Venereal	685
22. Secondary Venereal	224
23. Condylomata	27
24. Bubo	92
25. Nodes	20
26. Varicocele Operated upon	4
27. Varicocele not Operated upon	7

3695

SUCCESSFUL REDUCTION OF LONG-STANDING DISLOCATIONS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL
JOURNAL.

GENTLEMEN,—As I conceive the 'subjoined cases may be interesting to the profession, should you consider them worthy of a place in your excellent and useful periodical, you will please to insert them. I have obtained permission from my friend, Francis Hands, Esq., to do so, to whom I am indebted on this occasion for supervision of the cases, and for his friendly aid when I have required it in my own practice. I have much pleasure in being able in a public way to express my sense of his honorable conduct in seeking and giving that assistance, the absence of which in too many instances is painfully felt, or, when sought, abused.

I am, Gentlemen,

Your obedient servant,

JAMES DARKE, Surgeon.

Berkeley, Nov. 12, 1842.

CASE I.—William Joyner, nineteen years of age, a farmer's son, strong and muscular, residing at Frocester, county of Gloucester, on the 28th of July, 1839, when scuffling with another man, was seized by the leg and thrown down, his left arm at the time being bent across the loins. On rising up he found that he was unable to use his left forearm, and supposed it broken. On arriving at his residence a medical gentleman was sent for, and his assistant attended, who pronounced the case to be one of dislocation of the elbow. Cold applications were used, and the following day reduction was attempted without alter-

ing the situation of the parts. Doubts were entertained as to the real nature of the injury, owing to the swollen state of the joint. Leeches and evaporating lotions were applied, and continued for a month until the inflammation had subsided. About this time he made application to another practitioner, by whom the pulleys were applied for an hour, but unsuccessfully. After several attempts in various ways, and by different surgeons, the case was considered hopeless. Fourteen weeks after the accident, he applied to my friend, Mr. Hands, who requested my assistance in an attempt to reduce the dislocation. On the 14th of October, having previously employed general bleeding, and given tartar emetic until nausea ensued, the operation was commenced at half-past three, p.m., and successfully terminated at half-past nine. The mode of procedure will be found in the subsequent case of Uriah Tilley, with the exception that no counter extension was made from the elbow joint backwards, as in Tilley's case.

I have this day seen, and received the above account from, William Joyner, of the history of his case, and examined the joint, and seen that he has the almost perfect use of his arm. He says he is able to work as well as previous to the injury; he can flex it so as to touch the acromion of the scapula on the left (the injured) side, and nearly touch the scapula behind of the same side.

CASE II.—Uriah Tilley, aged twenty-nine, residing at Leonard Stanley, Gloucester, of spare habit, whilst walking across a ploughed field on the evening of the 27th of February, 1842, with his hands in his trousers' pockets, slipped into a ditch a foot and a half deep, falling upon his left side on the elbow. The following morning he applied for medical assistance; the joint and arm were so much swollen and inflamed that the medical gentleman applied to was unable to detect the exact nature of the injury. Means were employed to subdue the inflammatory action, and after the swelling had partially subsided the diagnosis was still doubtful. The same treatment was pursued for several weeks, and at the expiration of two months it was pronounced to be a dislocation of the elbow, and reduction was attempted but failed. The patient afterwards sought relief from several individuals and public institutions, by whom the pulleys were applied three times to reduce the dislocation, but all without success.

Five months after the receipt of the injury he applied to my respected friend, Francis Hands, Esq., of this place. The following appearances presented themselves:—

The forearm was very slightly flexed, incapable of motion more than one inch, and shortened by three inches; the humerus was resting upon the front of the ulna and radius, the external condyle lying between them and partly resting upon the tubercle of the radius, the trochlea riding upon the ulna. The olecranon process of the ulna was about three inches above its normal situation; beneath it a cavity; no condyles to be felt; the olecranon was very prominent; the triceps extensor cubiti relaxed. The least attempt at motion produced severe pain.

After maturely considering the case, Mr. Hands resolved to attempt to reduce it, and requested me to assist him. On the 31st of August, 1842, exactly

the day six months on which the injury was sustained, the operation was commenced and conducted in the following manner:—The patient was placed in a chair in such a manner that when the arm was extended the elbow joint projected beyond a perpendicular and immovable post, which was well padded and kept wet with water. He was securely fixed in this position by well-padded straps bound firmly round the arm immediately below the shoulder (the scapula and muscles of the shoulder were fixed by the usual means), which passed across the chest, and attached to a staple in the wall. The forearm was encircled by a wetted roller, upon which the cuff was placed and the pulley adjusted to the ring of the cuff. At half-past three, p.m., extension was commenced in a right line, being very gradually increased every ten minutes. The extension was continued in this direction until five o'clock, at which time the olecranon had made a very perceptible advance towards its proper position. The direction of the extension was now altered from a right line to an angle of about twenty-five degrees, great care being taken to keep up the extension by assistants whilst the pulleys were moved; it was continued in this direction until eight o'clock, when it was again altered to an angle of about sixty degrees with the same precaution as before. The elbow had by this time projected considerably beyond the post, and the patient's body was drawn against it. It was deemed necessary at this stage of the operation to make counter extension at the elbow. He was going on well, the adhesions and muscles gradually giving way, and the bones slowly approaching their normal situations, when the staple, which confined the patient's body to the wall behind, broke away, but fortunately it was productive of no ill consequences on account of the counter extension which was being made at the elbow, which still retained the arm in its position. At ten o'clock the direction of the extension was changed to a right angle, and after being continued in that direction about an hour, it was discontinued, and the forearm was made fast to a staple; the pulleys were removed to where the counter extension was being made—viz., just above the elbow; and the joint was now fairly brought to a right angle, bent, and round the post; the extension from behind the elbow was kept up until twelve o'clock, when the heads of the bones were found to be in their relative situations. The extension was gradually diminished, and the patient released from his long confinement.

The day following the operation, considerable tumefaction and erysipelatous inflammation presented themselves in the whole limb, which continued to increase for two or three days. Bleeding and evaporating lotions were employed, and the free use of opium had recourse to; this succeeded in arresting the inflammatory action, which terminated in the usual vesicles. It is now twelve weeks since the operation, and the case is progressing most favorably. The patient is able partially to flex and extend the arm so as to touch his chin and raise his hand to his head.

From the experience of the former case of William Joyner, in which the subsequent inflammation of the arm was very severe, Mr. Hands was induced to delay immediately operating, by placing the patient under a course of preparatory treatment, which consisted in

reducing the system; thereby relaxing the muscles, and with the hope of diminishing the severity of the consecutive inflammation. In this case, the subsequent inflammation was much less severe, and more easily controlled than that of William Joyner, which is attributed to the previous and more graduated reduction of the tone of the system, and justifies the course adopted and its desirableness in such cases.

It is hoped the success which has attended this attempt to reduce luxations of long-standing, will induce the profession to make similar efforts and not abandon patients (generally of the lower orders) to a life of decrepitude and dependence.

POISONING FROM LUCIFER MATCHES.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Cases of poisoning by lucifer matches being exceedingly rare, perhaps the following may prove interesting to the readers of your Journal.

On November 30, Mr. Young, house-surgeon to the Leicester Dispensary, requested me to assist him in examining the body of a little girl, aged six months, who five days previously had sucked the end of several lucifer matches, commonly called "Albert and Victoria." The following are the symptoms as given me by Mr. Denton, the medical attendant, and the parents.

About eight hours after sucking the matches, violent sickness came on, which continued during a night and day; the matter ejected being luminous and, as well as the breath, emitting a strong phosphorescent odor. After the cessation of the sickness, the child lay in a drowsy, stupid, and comatose condition, till within a few hours of its death, when it was seized with convulsions, and died in one of the paroxysms. The bowels, during the whole time, were sluggish, requiring frequent exhibition of enemata to cause evacuations.

Post-Mortem Appearances Twelve Hours after Death.

On opening the abdomen, the peritoneum presented nothing abnormal. Near the pyloric orifice of the stomach a large injected patch was seen, the mucous membrane being thickened and softened. The duodenum and jejunum were quite in a healthy state; along the whole course of the ilium several oblong patches, from half an inch to three inches in length, attracted notice, the mucous membrane being thickened, softened, and in many places ulcerated; the colon and rectum were healthy; the liver was larger, paler, and more indurated than natural; the lungs and pleura were healthy; the pericardium contained from half to one ounce of fluid; neither the brain nor œsophagus were examined.

Your obedient servant,

R. A. LAFARGUE, M.R.C.S.L.

Leicester, Dec. 16, 1842.

ON STAPHYLORAPHY IN CASES OF CLEFT PALATE.

By M. Roux, Paris.

The velum palati, like the upper lip, may be affected by a species of congenital malformation, which consists in fissure or separation of the lateral portions,

along the median line. This division may be *simple*—that is, confined to the soft parts; or *complicated*—that is, extending more or less to the hard palate, or even comprising the alveolar processes of the superior maxillary bone and the upper lip. Artificial reunion of the velum palati has been chiefly applied to the congenital disease; but it is equally suited to accidental malformations arising from ulceration, wounds of the mouth, or certain operations for the extraction of polypi, foreign bodies in the pharynx, &c.

In some cases the disease is confined to simple bifurcation of the uvula; in others, which is less common, a part of the soft palate only is divided; in ordinary cases the fissure extends to the whole of the soft palate. M. Roux lately saw rather a rare example in the son of a German physician; the soft and hard palates were separated, but there was no hare-lip; the velum palati, however, was imperfectly united by a thin transparent membrane, evidently formed by the mucous membrane. Although the fissure always exists on the median line the two sides of the palate do not always present the same degree of thickness or breadth—a circumstance which may cause some trouble in fixing the needles properly. On the other hand the palate may be in various states which are more or less favorable for the success of the operation. It may be solid, thick, and capable of supporting the sutures well; or it may be thin, membranous, and semitransparent. The degree of separation varies much; sometimes it is produced by simple bifurcation of the posterior nasal spine; sometimes by complete separation of the two sides of the roof of the mouth. In the latter case the cavity of the mouth communicates freely with that of the nares and pharynx.

As to solutions of continuity arising from wounds, we can readily conceive that they must be extremely irregular and of various forms, according to the causes which have produced them. The same remark applies to deformities from syphilis or scrofulous ulcerations, and the latter are much more frequent than has hitherto been supposed, their ravages being erroneously attributed to secondary syphilis.

Having thus briefly noticed the anatomical varieties of cleft palate, it may be well to enumerate, as briefly as possible, the inconveniences which arise from this deformity. In new-born children it gives rise to great difficulty, or even impossibility, of drawing the breast, according to the extent of the fissure. When the velum palati alone is cleft the child may be able to suck; but even then, whenever he is placed in a horizontal position, deglutition becomes extremely difficult; some assistance, however, may be rendered by placing the infant erect, and by pressing the bosom. When the hard palate and lip are divided the child is incapable of sucking, and must be supported by artificial means. As the individual advances in life much inconvenience may arise from a difficulty of pronouncing words intelligibly, and the voice is always nasal and disagreeable; certain guttural sounds can never be produced. The English physician on whom M. Roux performed his first operation pronounced the *th* like *s*, and spoke more distinctly in French than in English. "Verba naribus egredientia videbantur." Amongst minor inconveniences may be reckoned the impossibility of blowing, of drinking in the horizontal

position, playing wind instruments, &c. &c., a great tendency to reject all fluids through the nares.

A remarkable fact, which should have been noticed before, is that the two sides of the velum approximate each other, or come into contact during efforts at deglutition; it was this fact which first led M. Roux to the idea of uniting them by suture.

Staphyloraphy is an extremely delicate operation; it requires so much docility and patience on the part of the individual operated on that it should not be attempted before the age of fifteen or sixteen; but this period may be slightly advanced or deferred, according to the determination and courage of the patient. The operation may, indeed, be performed at any period of life; and the earlier it is done the less chance we have of being foiled by a vicious habit of pronunciation; but experience shows that the chances of success are not sufficient to warrant us in undertaking it before the period just mentioned.

In cases of cleft palate complicated with fissure of the hard palate and upper lip, the hare lip should be united at as early an age as possible.

The instruments employed during the operation are known to all surgeons. They are few and simple; flat ligatures, formed of two or three threads, and fixed in the needles, needle-carriers (*porte-aiguilles*), hooked forceps, common forceps, a probe-pointed bistoury, and a pair of long-bladed curved scissors, &c. The most convenient needles are from 0.44 to 0.88 of a line in breadth, slightly enlarged near the eye; of a parabolic form, the curve being 0.88 of a line and the branch which supports the eye being about six or seven lines longer than the other branch.

The patient is placed on a low seat; the ligatures are inserted from below upwards at equal distances; generally three in number, commencing from behind and at from 3.5 to 3.9 lines from the edges of the fissure. When the point of the needle has passed clearly through, the needle-carrier is opened, and the ligature disengaged by the forceps. The three ligatures being thus placed, the surgeon proceeds to refresh the edges of the fissure. The inferior part of the velum is seized by the hooked forceps, and the excision which has been commenced with the scissors is finished with the bistoury; the flap or portion of tissue thus removed is about 1.7 to 2.2 lines broad. The ligatures are now tied in the same order that they were placed; the first knot being held by the ring-headed forceps, until the second one is fastened.

Such is the usual course of proceeding, but in cases of division of the hard palate the following modification is made:—When the edges of the fissure have been refreshed, the soft parts are divided transversely by an incision which runs along the posterior edge of the palatine bones. This aids very considerably the extensibility of the two sections of the velum palati, and enables the surgeon to unite them without using the slightest force.

Every circumstance which may impede the union of the parts must be carefully avoided. The patient must observe complete silence, and avoid every excitement; he must not swallow his saliva, and even food must be abstained from, the ill-effects of abstinence being counterbalanced, if possible, by nutritious enemata. It must be confessed, however, that the

latter are very inefficacious substitutes for food, and few patients can support absolute privation from it. In two cases the want of food gave rise to severe agitation and delirium; on the whole it may be prudent to let the patient have some liquid sustenance in small quantity.

The immediate results of the operation are a sense of tension in the back of the mouth, and sometimes smart pain extending into the ear. The ligatures should be removed on the fourth or fifth day; the inferior ligature the last in cases of simple fissure, but first in the complicated form. Sometimes we can remove the ligatures on the fourth day; sometimes the inferior or superior one is left in for a day longer, according to the distinction just made. The thread is simply taken hold of by a forceps, and cut through. The patient should have some broth before the ligatures are divided. During the next few days he must preserve silence, and take nothing but broth.

The following analysis of nine cases operated on during the course of the year 1841 will serve to furnish some idea of the results of this operation:—

CASE I.—A patient, twenty years of age, had a fissure involving the hard and soft palates and the upper lip. The hare-lip had been operated on some years previously by M. Sanson. A considerable interval separated the two segments of the roof of the mouth in nearly its whole extent; the velum pendulum was thick and strong. The operation was simple: M. Roux divided the velum transversely near the edge of the palatine bones. The patient was examined five months after the operation, and found to be in a most satisfactory state. The fissure was very considerably reduced, appearing merely as an oval aperture; he could now speak distinctly, whereas before he could not pronounce words intelligibly.

CASE II.—This case was analogous to the preceding one. M. Roux had operated on the patient for hare-lip when he was five years old, and the effect of that operation was to diminish the interval between the lateral portions of the hard palate. Ten years afterwards, in April, 1841, staphyloraphy was performed with complete success.

CASE III.—This was the case of a girl, twenty-one years of age. The lip was intact, and the fissure occupied the soft palate only. The operation lasted about half an hour; its results were satisfactory, a small aperture only remaining, which will probably close up with time.

CASE IV.—Vassel, thirty-one years of age, was admitted into the Hôtel-Dieu on the 4th of July, 1841. He was born with simple cleft palate; there is, however, a slight notch in the posterior nasal spine; the lateral segments of the velum are of equal thickness, but the left is narrower than the right.

The operation performed on the 5th of July, presented nothing remarkable, if we except some difficulty in fixing the left portion of the superior ligature. When the threads were drawn together, a small aperture remained, which it was impossible to obliterate by tightening the upper knot. On the following day, in spite of injunction, the patient talked constantly and drank frequently. On the 9th the ligatures were removed; union had taken place at a small point only, near the middle of the fissure. This was M. Roux's hundredth operation.

CASE V.—Maret, was admitted into the Hôtel-Dieu on the 8th of July, and the operation performed on the 20th. This was a case of fissure extending through the whole of the palate and upper lip. M. Beclard had operated for the hare-lip when the patient was seven years old, but the operation was only successful in part. The edges of the wound had united by the second intention, but the anterior portions of the hard palate had been so completely approximated, that there was not the slightest interval between the incisor teeth. The left side of the velum was narrower than the right; both were thick and well organised. On the 24th, the two inferior ligatures were removed; reunion had not taken place at the lowest points. On the 25th, the superior thread was removed, and here union was perfect. He left the hospital on the 28th.

CASE VI.—A young man, twenty-two years of age, had simple fissure of the velum, with bifurcation of the posterior nasal spinous process. The operation was performed on the 20th of July, 1841. The two superior ligatures were removed on the fourth day, and the inferior one on the fifth. Complete union had taken place, but the cicatrix gave way opposite the lower thread, in consequence of violent coughing. There likewise remained a very small oval aperture from the bifurcation alluded to. On the 13th of August it became necessary to apply a fresh ligature over the inferior portion of the velum.

CASE VII.—Mas, twenty years of age, a musician, was operated on at the Hôtel-Dieu, on the 24th of August. The case was one of simple fissure of the soft palate. Four days afterwards the ligatures were removed and complete union had taken place. The cicatrix was firm on the 29th, when the patient was allowed to speak and eat. On the 31st nothing remained, except an oval aperture of 0.8 to 1.3 of a line in diameter, from bifurcation of the posterior nasal process.

CASE VIII.—The operation in this case was performed in London, in the month of September, 1841, on a man, thirty-five years of age, not for congenital malformation, but for loss of substance from syphilitic ulceration. The operation failed.

CASE IX.—This operation also failed; it was performed on a tailor, named Hurel, eighteen years of age. The velum palati was thick and short, divided in its whole length; the posterior moiety of the hard palate was likewise fissured. On the 1st of November, 1841, two sutures only were inserted, as the palate was narrow; the edges of the wound were easily refreshed and the transverse incision made without difficulty. There was some trouble in tying the inferior knot, because the uvula was constantly driven against it, by the base of the tongue. The two threads were removed on the 5th, when it was found that the middle portion of the wound only had united. The voice, however, was less disagreeable. On the 7th, the whole of the cicatrix gave way while the patient was coughing.

From the preceding observations, it appears that of the nine cases just related, five were examples of complete and complicated fissure of the palate, cases in which the prognosis is always unfavorable. In three of those five cases the result was as favorable as could be expected; in one of the remaining two the

operation completely failed; in the other a partial benefit resulted. Four cases were examples of simple fissure, although in two there was bifurcation of the posterior spinous process, which is always followed by the persistence of a small aperture. This latter can only be removed by having recourse to palatoplasty, and seldom if ever closes of its own accord. Finally, of two of the most simple cases, one failed, while the other was only partially successful. Of the nine patients operated on, one was a female; their ages varied from 15 to 35; the majority of cases (5 in 9) occurred between 20 and 22 years.

Although the operation is, in itself, attended with no danger, yet in 3 of the 105 cases it was followed by death. In one, severe inflammation of the pharynx set in, and extended to the air-passages. The second was a young Englishman, who died with irregular nervous symptoms. The last case occurred in the daughter of an eminent English nobleman, who was carried off soon after the operation by phthisis. In 1828, M. Roux had performed 40 operations for cleft palate; 19 were cases of simple fissure, and of these 13 were successful, 6 unsuccessful; 21 were cases of complicated fissure, of which 12 failed, and 9 succeeded. In 1834 he had performed 68 operations; in 1842, 105.

The general result was, success in two-thirds of the cases of simple fissure; and in one-third only for cases of complicated fissure. This is not so favorable a result as that obtained from the earlier operations, but as it is drawn from a large number of cases, it probably gives a fair estimate of the chances of success or failure of the operation.—*Gaz. Med. de Paris*, No. 30.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, DECEMBER 24, 1842.

Not the least valuable among the results of the registration is the prospect afforded of attaining through the returns some knowledge of the laws which regulate the development and progress of epidemic disease. We have before had occasion to direct attention to the prevalence of different diseases of this character at different times. The second report of the registrar-general shows, that although various affections belonging to the epidemic class are coexistent at the same time in different localities, there is yet a general rise, prevalence, and decline of each occurring at different times, and apparently following in their progress certain definite laws throughout the whole extent of country embraced in the returns. An additional confirmation is thus afforded to the accuracy of the ancient writers in matters of observation; and the dissertations of Sydenham, on the epidemic constitution of the atmosphere at particular times and seasons, derive fresh interest and importance.

The influence of climate, season, age, sex, temperament, occupation, and local peculiarities of situation,

or individual circumstances, is apparent in a great number of diseases. Many of the ills which flesh is heir to are manifestly traceable to the operations of some of these conditions of the human frame, while they are favored or impeded by the varying nature of others. Epidemics, however, would seem to follow laws of their own, which, though to a certain extent modified by the operations of the ordinary and more appreciable influences of known physical agents, are yet in a measure also independent of them. The returns for 1838 contain information respecting an epidemic of small-pox, which has enabled Mr. Farr to investigate some of the laws by which that disease would seem, in the instance referred to, to have been governed. We have thus obtained valuable data, with which the progress of future epidemics of this and other diseases may be compared, and from which their probable extent and fatality may, in the earlier stages of their course, be prognosticated. At the same time, the agency of several causes formerly supposed to be influential in contributing at least toward the spread of epidemic disease, has been shown in this particular instance to be very questionable. Much diversity of opinion has existed as to the effects of season in limiting or favoring the spread of various epidemics. According to some authorities cold, according to others heat, while, according to a third class, the extremes of either, are concerned to check the progress of diseases usually classed under this head. These opinions, however, have often been advanced on limited or partial observation; or otherwise taken up on insufficient grounds. In the small-pox of 1837-39 we find the deaths registered as follows:—

Periods ..	1837.		1838.				1839.			
	1	2	3	4	5	6	7	8	9	10
Seasons ..	Sr.	Au.	Wr.	Sp.	Sr.	Au.	Wr.	Sp.	Sr.	Au.
Deaths ..	2513	3289	4242	4489	3685	3851	2982	2505	1533	1730

In this table it will be observed that there is an almost regular increase and decrease from the summer of 1837 to the autumn of 1839, with the exception of a trifling excess in the autumn of the years 1838 and 1839 over the corresponding summers of those years. Mr. Farr shows, however, that by taking the mean of the deaths of the several successive periods of the years 1838 and 1839, a series of numbers is obtained, which corresponds very nearly with the results of a calculation founded upon the supposition, that the decrease in the mortality was at a uniformly accelerated rate. The deaths actually observed in the decline of the epidemic, as compared with those in a regular series, are as follows:—

	1.	2.	3.	4.	5.	6.	7.
Calculated	4364	4147	3767	3272	2716	2156	1635
Observed	4365	4087	3767	3416	2743	2019	1631
Difference	1	60	0	144	27	137	4

These results very closely correspond, and afford a successive decrease of 5, 10, 15, 20, 26, and 32 per cent. The discrepancies between the calculated and the observed numbers may arise from various sources, as many disturbing causes are in operation. Thus, as Mr. Farr remarks, “the rates vary with the density of the population, the numbers susceptible of attack, the mortality, and accidental circumstances; so that to obtain the mean rates applicable to the whole population, or to any portion of the population, several epidemics should be investigated. It appears probable, however, that the small-pox increases at an accelerated and then a retarded rate; that it declines first at a slightly accelerated, then at a rapidly accelerated, and lastly at a retarded rate, until the disease attains the minimum intensity, and remains stationary.” The following table shows the results obtained where the further necessary correction, such as equalising the duration of the quarters (which, in the former estimate of three months to each, vary in length from 90 to 92 days), &c., are made.

SMALL POX.		1838.				1839.			
Ann. Rate of Mortality per Cent. in England (obsvd.)		Mar. 31. June 30.		Sep. 30. Dec. 31.		Mar. 31. June 30.		Sep. 30. Dec. 31.	
		114	105	096	086	070	051		
Ann. Rate of Mortality per Cent (calculated).		114	105	096	086	070	050		

If we receive these calculations as abstractedly correct, it is obvious that the influence of all such causes as are connected with purely climatorial variations within the limits of the time and extent of country embraced in the returns, is absolutely null. The extremes of heat and cold, of moisture and drought, the variations of atmospheric pressure, of electrical tension, &c., the varying force and direction of the winds, do not seem to have excited the slightest influence in disturbing the regularity of the progress of the epidemic. An objection, however, which may be made to this conclusion, is the slight excess observed in the mortality of the autumnal seasons over the preceding summers; and although Mr. Farr has ingeniously succeeded in getting rid of the disturbing effect of this excess upon his calculations, by distributing it partly over the preceding, and partly over the succeeding seasons, the excess, nevertheless, actually remains, and, as it appears to us, to that extent vitiates the apparent accordance of the observations with the calculated series of numbers. We do not question the correctness of the mode of calculation; we do not doubt that the ratios and constants of increase and decrease thus obtained are actually the expression of the laws by which the progress of the epidemic in question was governed; but we are inclined, at the same time, to consider, that a farther correction for some disturbing influence, possibly connected with the season, which the mode adopted by Mr. Farr has masked rather than solved, may be requisite.

The mortality of the disease, also, may be taken in

general terms as a measure of its intensity, but it is not necessarily a measure of the extent of its diffusion. One epidemic shall afford a vast ratio of prevalence, while another, of much less extensive diffusion, may give a much higher ratio of mortality. The laws which regulate the progress of the disease may, therefore, be very different from those which govern its mortality; and it is manifest that it is upon these last only that the registration returns can throw any light. Many disturbing causes, also, in the case of small-pox are obviously present in different localities under varying circumstances. The small-pox, as Mr. Farr himself remarks, would be disturbed and sometimes arrested by vaccination; whilst there is every reason to believe it is often diffused by inoculation. These are all conditions which should induce us to hesitate before we admit as conclusive any attempt at generalising the results of observation in the manner in which those here referred to have been treated. Could we be assured that, of any given epidemic, the mortality would be found in the same ratio to the cases throughout its whole extent, the laws of its progress would then be in accordance with those regulating the mortality. For instance, if the mortality be one in twenty of the cases throughout, the progressive increase and decrease of the number of deaths will afford a positive indication of the extent of the disease, and the same laws which regulate the one would also regulate the other. But there is reason to believe that the mortality of a disease is often influenced by causes which do not bear equally upon its prevalence. It has often been asserted, and apparently upon sufficient grounds, that epidemics are always more fatal at their commencement and during the height of their prevalence, than during their decline. Still, we are disposed to agree in the conclusion to which Mr. Farr's calculations lead, that climatorial variations exercise but little influence on the mortality and spread of small-pox, and perhaps also on epidemics in general. Some facts, referring to the prevalence in the metropolis of typhus and typhoid fevers, scarlet fever, measles, small-pox, and hooping cough, which tend to establish this point, are brought together in the report, and have been referred to in a former number of this Journal. The researches instituted by the Provincial Medical Association into the last epidemic influenza are also illustrative of the same conclusion; the meteorological tables and observations by which the report of the committee of the Association upon that subject is illustrated, showing no appreciable relation between the atmospheric changes and the rise and progress of the disease.

Epidemics have, at various times, been attributed to various causes, among which Mr. Farr enumerates terrestrial emanations, the influence of the stars, mysterious changes in the atmosphere, heat, animalcules,

deteriorated food, and contagion. We are enabled by the facts embraced in the returns at once to set aside heat as an active agent in the generation of epidemic disease; the influence of the stars may also, in these times, be safely left to the researches of those ingenious gentlemen who speculate in animal magnetism, homœopathy, and the like. Perhaps, also, to them we may, for the present at least, safely commit the inquiry into the so-called mysterious changes in the atmosphere, and, as a source of epidemic diseases, terrestrial emanations also. Contagion, whatever influence it may have in the spread or propagation of disease from one individual to another, can certainly in no case be received as a primary cause of its origin; it is also shown, that while isolated cases of small-pox and other epidemics are, perhaps, always to be found in the metropolis and some of the larger towns, it is only at certain times that the contagion takes effect in so marked a manner as to give rise to extensive prevalence of the disease. Contagion or infection may be, and in some cases undoubtedly is, the actual means by which disease is conveyed from one person to another; but how it is that these means are all-powerful at one time, and at another of no efficacy, is the point which requires elucidation, and upon which the assumption of contagion as a diffusive source of epidemic affections throws no light. The effect of deteriorated or insufficient food, and the presumed agency of animalcules, alone remain for consideration. The former of these is unquestionably operative in certain forms of disease, and is worthy of a more extended investigation with special reference to this point than it has yet received. The occurrences at the Milbank Penitentiary some years back, and the records of some of our union establishments, afford valuable data with reference to the effect of insufficient food in the generation of cholera, diarrhoea, &c. The spurred rye is known to give rise to a peculiar form of gangrene; and some form of fever usually follows close upon a harvest in which the corn has not been sufficiently ripened. There can be no question, also, that the exhalations arising from too dense a population are among the most active and efficient causes of epidemics, and exert a marked influence in modifying their progress. "The mortality from small-pox," says Mr. Farr, "was greater in the metropolis than in all the other parts of England; and the rate of increase in the second, third, and fourth periods was 1.50, the deaths having been 506,753 and 1,145. The rate of increase in the first and second periods was 1.97, the deaths were 257 and 560.

The decline of the epidemic in the metropolis is shown by the following numbers:—

1. Mean quarterly deaths } registered	1103	959	611	240	91
2. Calculated series	1103	967	611	278	91

The number 1,103, in the upper line, was the mean of the deaths registered in the fourth and fifth periods;

959 was the mean of the deaths in the fifth and sixth periods; the other numbers were obtained in the same manner. The first rate of the calculated series was 1.14, and the other rates were obtained by multiplying 1.14 four times in succession by 1.39, the constant."

A comparative series, deduced by the same methods, is subjoined.

"Wales and the Western Counties of England—

1. Mean quarterly deaths } registered	1157 813 621 489 304 194 116 8,
2. Calculated series	1157 858 621 440 304 206 136 88

The first rate was 1.35; the constant, 1.023."

ACADEMY OF MEDICINE, PARIS.

December 13, 1842.

SCARLATINA.

M. Martin-Solon read a report on a memoir by M. Stevenart relative to the prevention of scarlatina by belladonna.

This remedy, long since recommended by the Germans for the above purpose, was administered by the author to 200 persons, inhabitants of a parish in which 96 individuals had fallen victims to an epidemic scarlatina. The 200 persons were all preserved from the disease; the belladonna was given in small doses during nine or ten days. In no case did it produce any injurious consequences, and 145 persons took it without experiencing the slightest appreciable effect.

M. Rochoux thought that the ideas of the Germans relative to the prophylactic virtues of belladonna were chimerical.

M. Guersant said that numerous facts established the utility of belladonna in preventing the development of scarlatina, and he was constantly in the habit of employing it for that purpose in family practice; he (Mr. G.) often remarked that as long as the persons took the drug they remained free from the disease, which appeared within two or three days, but in a mild form, after his ceasing to administer it.

M. Delens observed that so many writers had published facts establishing the influence of belladonna over the development of scarlatina, that he could not admit the opinion delivered by M. Rochoux. He had seen, himself, a very striking example. A child affected with scarlatina was brought home from school; he (Mr. D.) gave the belladonna to all the family except the child's grandmother, whose age, he thought, was sufficient protection. The whole family, with the exception of the old lady, remained free from the disease.

RESECTION OF THE SUPERIOR MAXILLARY BONE.

M. Hugier presented a young girl, sixteen years of age, who had undergone resection of the superior maxillary and malar bones, the os unguis and the inferior turbinated bone on the right side for an osteo-sarcomatous tumor of the maxillary sinus.

Six years previously the patient had fallen from a chair, and six months after the accident she began to feel pain in the molar teeth situate under the sinus. A tumor soon made its appearance in the canine fossa, and gradually extended to the palate, alveoli, and cheek bones.

The patient was admitted into the Clinical Hospital

on the 15th of September. The tumor was now as large as an orange; the nose was pressed to the left side, and the globe of the eye forced upwards and forwards; vision was impaired; the nasal fossa on the affected side was obliterated, and the right half of the palate formed a large tumor in the interior of the mouth. The alveolar processes were pushed downwards and forwards, and most of the teeth on that side had fallen out. There was no pain or sense of fluctuation in the tumor. The disease was considered to be osteo-sarcoma; but some doubts were entertained on account of the patient's age and apparent health. On the 22nd M. Hugier operated in the following manner:—The substance of the cheek was divided by an incision running from the anterior point of the zygomatic process to the edge of the upper lip, four lines above the angle of the mouth. The incision was carried to this point and not to the angle, for the purpose of avoiding Steno's duct and some filaments of the facial nerve. The soft parts were then dissected off from the surface of the tumor, and the wing of the nose detached from the ascending ramus of the maxillary bone; the inferior flap was separated in like manner. The malar bone was then cut through with a saw at its point of attachment to the zygomatic process, and the ascending ramus divided with the gouge and mallet. A transverse section separated the malar from the palatine bone, and a perpendicular one detached the right superior maxillary bone from the adjacent hard parts. The tumor, thus isolated on all sides, was seized and, with some force, removed; some portions of the tumor which remained behind were extracted by means of the gouge and mallet, and the whole cavity of the wound was cauterised with a hot iron. The ball of the eye had been exposed by the removal of the floor of the orbit. The results of the operation were extremely favorable; for three weeks no accident of any kind retarded the progress of the cure; but erysipelas set in on the 27th day, and the patient was afterwards attacked by modified small-pox. She is now, however, perfectly well, and the deformity is very trifling.

BIRMINGHAM PATHOLOGICAL SOCIETY.

November 5, 1842.

WILLIAM TARLETON, Esq., in the Chair.

STRICTURE OF ŒSOPHAGUS.

Mr. Tarleton presented to the meeting a drawing of a stricture of the œsophagus just above the stomach; above the stricture was an abscess, which had burst into the lung, and been attended by most offensive expectoration. The opening through the stricture was very small, and the patient, a female, was always conscious when food passed through the stricture. The preparation he had presented to King's College, London, with the following description:—

Sarah Bills, aged forty-four, was admitted an out-patient of the infirmary on the 15th of November, 1832. She has been ill about six months, with almost constant vomiting, during which time she has been under the care of several medical men, all of whom told her she was laboring under cancer of the stomach. After I had been attending her for a short time, I suspected the disease was in the œsophagus, because

when she swallowed, and once felt food in her stomach, she never vomited, and was much better for a day or two after; but when she swallowed and did not feel it get into the stomach, it was always returned generally unaltered, but sometimes contained a little mucus, and very rarely she vomited a fluid like coffee grounds. When I first saw her she was in the habit of drinking toast and water to a very great extent, which I forbid, except in small quantities. She was much relieved by abstaining from it. She always complained of immoderate thirst, and her mouth was very much parched. The breathing was free; pulse regular; her bowels were very costive, so much so that clysters did not succeed in bringing away the hard fæces. It was necessary to use the handle of a spoon for this purpose. This had to be repeated every three or four days for a month previous to her death. Nothing in the shape of medicine afforded her relief except very large doses of opium. She died on the 14th of January, 1833.

On examining the body after death, it was found that about two inches and a half from the cardiac end of the œsophagus there was a cancerous thickening, which had produced stricture, and immediately above this stricture there was an opening, by ulceration into the substance of the right lung, where a sac was, which would contain one ounce and a half of fluid; it then contained a brown fluid. The internal surface of the sac was very uneven, presenting almost a gangrenous appearance. The lung for some distance round the sac was firm in substance, more like liver than lung. This dense portion of lung ended about two inches round the sac. The right lung was firmly attached to the œsophagus; the left lung was healthy, and so was the greater part of the right. The stomach and other viscera were healthy. There was slight vascularity above and below the stricture.

THE UPTON UNION AND THE POOR-LAW COMMISSIONERS.

On Thursday last (yesterday), being the board day of the Upton Union, we attended, understanding that the election would come on of a medical officer for the fifth district, vacant by the very extraordinary decision of the poor-law commissioners in Mr. Morison's case; and that an investigation would also take place into a charge preferred against Mr. Sheward, another medical officer of the union, by Major O'Donoghue, a resident of Hanley Castle. On the latter charge the poor-law commissioners had also pronounced a decision, the result being that they issued an order to the Upton board, desiring them to recommend Mr. Sheward to resign his situation. Mr. Sheward, however, seems to have thought that the guardians, before enforcing this arbitrary command, would perhaps accord him a hearing in his own defence, and very happy indeed for that gentleman was it that he so thought, as will be seen in the sequel.

In recording the very extraordinary and exciting day's work of this union, we shall commence with the

CASE OF MR. MORISON,

which was incidentally brought before the board on the clerk announcing, as the clock pointed to noon, that the hour had arrived for proceeding to the busi-

ness of electing, as successor to Mr. Morison, a medical officer of the fifth district.

We should premise that the board was very numerous, there being no less than twenty-six members present; and as the press have not the entrée into boards of guardians which they have into courts of justice, the representatives of the press present had requested permission to attend from the board, which was at once acceded in the most courteous manner by the worthy chairman, T. C. Hornycold, Esq. On our admission to the board-room, we found Mr. Warwick, of Malvern, on his legs, with a copy of the Provincial Medical Journal for last Saturday in his hand, and speaking to an article in it. This article was the leader. We have perused it with infinite satisfaction. First, because it takes the same view of the evidence which we ourselves and the public generally took; and secondly, for the eloquent, manly, and straightforward style in which it denounces the unconstitutional conduct of the poor-law commissioners, and the odious tyranny of the whole proceedings against Mr. Morison. Mr. Warwick was insisting upon his right to make a defence of himself from a charge brought in that article against some person of private malice towards the victim of this anomalous procedure. The Chairman, however, said that no charge, at all events, had been made against Mr. Warwick by the board, and therefore he did not see why their time should be taken up with such statements; however, as Mr. Warwick wished to explain his conduct, he might do so when the election came on in the routine of the day's business.

The election came on as we have said; and the Chairman then asked if any guardian had anything to say, when no one rising, he explained that in terms of the poor-law commissioners' order, an advertisement had appeared in the usual newspapers from the board for tenders from medical gentlemen wishing to offer for the situation, and then called upon Mr. Skey, clerk to the board, to state whether he had received any tenders?

Mr. Skey stated that none had been presented.

It appeared that an application had come from a Mr. Young, of Worcester, but his testimonials did not make it appear that he was duly qualified, consequently there were no tenders before the board, and therefore there could be no election.—[There was here a general expression of opinion that this was precisely the result that might have been expected.]

Mr. Hill rose to move the postponement of the election, in consequence of there being no candidates, for another fortnight; and remarked that it would be necessary to choose some medical gentleman to officiate in the meantime, as Mr. Gardener's *interim* appointment expired that day. [Mr. Gardener was appointed on the nomination of Mr. Warwick, at the last board day, to take charge of the district till the election, but it appeared without his previous knowledge or consent.] Mr. Hill then suggested that Mr. Sheward should be requested to take charge of the sick paupers of the district till a new election took place. (Hear, hear.)

Mr. Warwick said he was prepared to tell the guardians that Mr. Charles West, of Malvern, would take the office.

Mr. Hill—Have you any authority for that? Don't

let us fall into the same mistake as with Mr. Gardner.

Mr. Warwick—Oh, yes: I met Mr. West as I was riding down here, and he told me that he would be very glad to attend to the paupers of the district.

On this assurance Mr. West was appointed medical officer for the vacant district for a fortnight.

The chairman then asked the board their view of the course necessary to be adopted, when Mr. Hill suggested that the vacancy should be re-advertised, and Mr. Warwick submitted that, to prevent any mistake, the poor-law commissioners should be written to for their advice. But the chairman declared that he saw no necessity for the latter; and it was the general opinion that there was no necessity to do more on this head than to advise the commissioners that there had been no tenders for the vacant office.

Mr. Walker then proposed that the advertisement should be sent to other papers than on last occasion.

The Chairman having inquired if the advertisement had appeared in the usual newspapers, was assured by Mr. Skey that it had. It had appeared in the "Herald" and "Journal," the papers fixed upon by the board for their advertisements. In these circumstances the chairman said that he saw no necessity in the present case for any alteration; and this being the general opinion, the vacancy was ordered to be re-advertised accordingly.

At this stage, Richard Temple, Esq., J.P., Kempsey, rose and said:—I wish to ask what is to be done with Mr. Morison? I have a strong feeling that he has been very ill used, and I am very anxious that it should not seem as if this board was indifferent to the fact.

The Chairman—I am as anxious, I assure you, as any gentleman can be on this subject, and shall be glad to learn the opinion of the board on it.

The Rev. A. B. Lechmere suggested that the best way would be to bring the subject regularly before the board, by giving notice of a motion for next meeting.

Mr. Temple—I am quite agreeable to that. I know nothing of Mr. Morison personally, and have had no communication with him; and I know nothing of the case but from the public papers; but I must say that I think he is an exceedingly ill used man. (Hear.)

Mr. Heach (Queendon) agreed with what had fallen from Mr. Temple, and added that the poor-law commissioners ought certainly to be made acquainted with the condition in which the poor had been left through their conduct in dismissing the board's medical officer in the manner they had done. (Hear.)

Mr. Temple—I submit that it is our duty to go into this matter. A medical officer of this union has met with very harsh treatment, after an investigation which, in my opinion, did not warrant it, and, therefore, I consider that as it is our duty to require our medical officers to perform their duties with all strictness, it is also our duty to protect them in the exercise of their functions from injustice and oppression. (Hear, hear.) Unless we act thus, how can we expect that gentlemen of character and respectability will accept the situation of our medical officers. (Hear, hear.)

Mr. Heach—It is not likely that they will. We have no right to look for it, but we need not be afraid

—the poor-law commissioners have the power, and will send you medical officers. (Hear.)

The board appeared all but unanimously to approve of what had fallen from Mr. Temple and Mr. Heach, and

Mr. Hill said that he believed that at next meeting, if no candidate appeared, Mr. Morison would be again put in nomination for the office. He thought it right to add, however, that he was quite positive that even although Mr. Morison should be elected by the unanimous voice of the board, that he would not accept the office. Still such a course would be an expression of their opinion. (Hear, hear.)

After some further conversation, Mr. Hill said—I am quite convinced that Mr. Morison had not the chance of a common felon in the investigation before the assistant poor-law commissioner. With due submission, I think that Mr. Power ought to have brought the investigation before this board, and thereby have given Mr. Morison an opportunity of defending himself before us. The investigation was a mere hole and corner affair, and if Mr. Temple or any other guardian proposes a resolution embodying what has been stated, that will meet my views, and I think will be putting Mr. Morison in the position in which every honest man ought to stand. (Hear, hear.)

Mr. Temple—Here you have a medical officer dismissed, and you, *as a board*, know nothing of the circumstances. I think this is not proper treatment.

Mr. Fletcher (Kempsey)—The case was previously before this board.

Here a number of guardians together cried out "No, no, only the charge."

Mr. Warwick said that he was most anxious, as a guardian of Great Malvern, that the evidence taken before the assistant-commissioner in Mr. Morison's case should be laid before the guardians. The commissioners could not refuse this request, having granted it in Mr. Sheward's case. The production of that evidence to the board would, he was certain, satisfy the public who were in ignorance of the facts of the case. [This is cool after the full report of the evidence supplied by ourselves and others.]

Mr. Temple again urged the necessity of the board giving some expression to their opinion of the case, and concluded by saying, "My own private opinion being—and it seems to be that of us all, if I may say so, judging from what I hear around me—that Mr. Morison is not guilty of the charge, and, therefore, has been cruelly used." (Hear.)

Mr. Hill—I say so, and I would have betted twenty to one that Mr. Morison could not have been found guilty. (Hear.)

Mr. Lakin then proposed as a resolution, that the circumstances that led to the dismissal of Mr. Morison be taken into consideration at the next meeting of the board; that Mr. Morison be requested to attend that meeting; and, in the meantime, that the clerk do write to the poor-law commissioners, requesting them to send to the board the minutes of evidence taken by Mr. Power in Mr. Morison's case.

Mr. Temple rose to second the motion, but Mr. Warwick, with great *empressment*, begged to be permitted to be the seconder; his request was granted, the discussion dropped, and the board proceeded with

MR. SHEWARD'S CASE,

which we venture to pronounce as absolutely the

most trumpery affair that ever engaged the attention of any body of investigators. The present inquiry was commenced, Mr. Sheward being present, by Mr. Skey reading a set of documents received by the board from the poor-law commissioners—viz., 1. A letter indicating they had received a letter addressed by Major O'Donoghue to the Upton board of guardians, complaining that Mr. Sheward had received an order from Mr. Twinberrow, overseer of the parish of Welland, to attend a sick pauper, named Ann Williams, dated November 2nd, but that although her's was a case of urgency he had not attended her till November 9th; also a copy of letters addressed by Major O'Donoghue to Mr. Sheward, one dated November 9th, requesting him to attend Ann Williams, and another dated November 12th, explaining that the letter of November 9th, addressed to the board, had been sent to the commissioners in consequence of there being no board-day at Upton that week; that thereupon the poor-law commissioners had put these letters into the hands of Mr. Power, assistant-commissioner for the district, who had investigated the charge, and that on consideration of the evidence and Mr. Power's report, the commissioners had come to the conclusion that it was "the general practice of Mr. Sheward to send medicines to his pauper patients instead of visiting them," and that, "on his own admission, he was generally neglectful or inadequate to perform the duties of a medical officer, as proved by his general practice. 2. Major O'Donoghue's letters above described. 3. The minutes of evidence taken by Mr. Power.

The evidence taken by Mr. Power consisted of a statement by Mr. Sheward, and depositions by Catherine Williams, sister-in-law of the sick pauper; Ann Rodway, a neighbour of the pauper; and Mr. Smith, an assistant of Mr. Sheward.

From these it appeared that, November 2nd, Catherine Williams, a woman of such weak intellect that her evidence was not taken upon oath, procured an order for her sister for medical relief from Mr. Twinberrow, overseer of the parish. So far from this order being looked upon as for a case of urgency, Catherine took it home, though Mr. Twinberrow's house is half way to Upton, and it was sent to Mr. Sheward next day by a woman named Hemming, who described the disease as constipation of the bowels, attended with some symptoms consequent on child-bed. Mr. Sheward gave Hemming some medicine to take to the patient. On November 5th Catherine Williams came to Mr. Sheward's for more medicine, but did not request Mr. Sheward to call on her sister. On the 8th she called again, and then requested Mr. Sheward to visit the patient. On the 9th, before receipt of Major O'Donoghue's letter, Mr. Sheward visited the pauper.

The "admissions" of Mr. Sheward, which the commissioners consider to militate so heavily against him, consisted in his reply to a remark by the assistant-commissioner that, notwithstanding that Hemming, when she delivered the order, did not request him to attend, yet that he ought to have visited the patient notwithstanding. That reply was, "If you will lay down as a general rule that I am, in every case, without exercising my discretion as to its necessity, to get upon my horse and visit the patient, I have but

one course to pursue, either to ask for an increase of salary, or to tender my resignation, for it is impossible to comply with this rule under the present rate."

The witnesses adduced before the assistant-commissioner now repeated their former testimony; and, in addition, Hemming stated that she had carried the order, because, being a married woman, she could describe Williams's case sufficiently to prevent the necessity of Mr. Sheward's attendance; and, moreover, that if she had called for the medicine on November 8, it would have prevented Mr. Sheward's visit on the 9th. Rodway stated that the patient had been employed "at wash" with her on the Tuesday preceding Tuesday, November 5, and that Williams did not complain of Mr. Sheward for not having attended her. Ann Williams, the patient, who was described in Major O'Donoghue's letters as in very dangerous circumstances, "if not already beyond help," appeared to-day quite recovered. She corroborated the preceding witnesses in the important points of not having requested Mr. Sheward to attend her, and added that she never intended to have complained against Mr. Sheward, but that it was the Major who wished to send the complaint to Upton. Rodway stated distinctly that, though Williams was confined to her bed, she never looked upon her as in any danger. She herself had been attended by Mr. Sheward, and always considered him very attentive.

A number of letters from respectable residents of Welland and Hanley Castle, were then put. They certified in the strongest terms the humane and attentive conduct of the accused towards the poor. Two memorials to the same effect were also read from the parishes of Newland and Hanley. They contained the signatures of almost every rate payer in both parishes.

Mr. Temple made some forcible remarks upon the fact that, though the charge against Mr. Sheward—viz., Major O'Donoghue's letter was addressed to the board, yet the investigation had not been allowed to be conducted by them, but by the poor-law commissioners.

Rev. A. B. Lechmere—Yes; and Mr. Power goes to the accused person at eleven o'clock of the night before the day of investigation, and orders him to attend, nor would he put off the investigation at the request of Mr. Sheward, who told him that he had to meet in consultation upon a dangerous surgical case at the time fixed upon.

Mr. Heach—I think it is the board's own fault. When Mr. Morison's case came on, you referred it to them.

The Chairman—I particularly drew the attention of the board to the fact that we did not ask the poor-law commissioners to adjudicate on the case; we only asked their advice. And now then, gentlemen, having heard the evidence, are you of opinion that you ought to obey the direction of the poor-law commissioners, and dismiss your medical officer?

Mr. Rayer—I should say most certainly not. (General cries of "Certainly not.")

The Chairman—Then I may say it is the unanimous opinion of the board that Mr. Sheward is not guilty of the charge, and ought not to be dismissed from his office.

It was unanimously resolved that the board, having

carefully investigated the whole circumstances of the case, find the charge of general neglect, and of neglect in this particular instance, entirely disproved, and, therefore, they do not feel that they ought to request Mr. Sheward to resign.

The guardians appeared to take the deepest interest in the business of the day, and to feel most earnestly with Mr. Temple that it was their duty to protect, if they could, their officers from such unexampled and wanton persecution as is disclosed in these two cases. —*Worcester Herald*, Dec. 17.

RULES FOR AUSCULTATION.

By DR. WALSH.

In performing auscultation several precautions, affecting the observer and the observed, are to be attended to. 1. The chest should be uncovered, or, if such exposure be inadmissible, as thin a layer of clothes as possible allowed to remain between its surface and the stethoscope. 2. All friction between the stethoscope and the patient's or the observer's clothes should be carefully prevented. 3. The position of the patient should be regulated in the same manner as for the performance of inspection; an unconstrained state of the muscles being particularly necessary, in order to ensure free entry of air into the lungs. The sitting posture is, everything considered, the most conducive to perfect investigation, provided the chair employed have a tolerably high seat. While the front of the chest is submitted to examination, the patient should sit not exactly erect, but with the trunk sloping a little backwards, the arms being allowed to hang loosely at the sides. When the observer proceeds to examine the lateral regions, the patient may be directed to clasp his hands on the top of the head, in other respects retaining his former posture; and lastly, when the posterior regions are examined, sit upon the chair astraddle, with his back to the observer, his arms crossed, and his head bent somewhat forwards. *Mutatis mutandis*, the same precautions are to be taken when the patient stands, lies, or sits up in bed. 4. It is of importance to apply the stethoscope firmly but not forcibly to the surface; too slight or too strong pressure interferes with the accurate transmission, or alters the character, of the sounds. Besides, persons with tender skins, or in a state of extreme emaciation, cannot endure rough application of the instrument. 5. Great care must be taken to ensure accuracy of contact between the skin and every point of the circumference of the end of the stethoscope; as a necessary condition for this, the instrument must be held perpendicularly to the surface. 6. The position of the observer should be free from all constraint; he should apply his ear to the stethoscope in the same manner as the instrument to the chest; concentrate his attention upon the sound examined; and, unless a most experienced auscultator, proceed (as far as is compatible with the patient's safety) slowly with his examination.—The motto *festina lente* is a good one for the beginner in the study of physical diagnosis. 7. It is advisable to commence the auscultation of patients, while they breathe in the manner to which they are naturally inclined; because it is important to ascertain the precise natural condition of the respiration, and be-

sides, directions for the regulation of the act often puzzle. Some individuals, however, absolutely require guidance, as the moment they perceive the instrument applied to their chest, they throw the muscles of the trunk into violent and unnatural motions, which, of course, materially impede the entry of air into the lungs. The readiest way of making such persons breathe in an efficient manner is, to perform several quick *noiseless* respirations before them, and desire them to imitate these. This method will, however, occasionally fail; our object may then be gained by desiring them to sigh, to speak, or to cough. The deep inspiration required for the performance of these acts will at once enable the observer to ascertain the condition of the murmurs; and indeed there are many states of the lung in which, quite irrespectively of the patient's manner of breathing, much information may be gained by a single cough. 8. Certain sounds produced in the pharynx are liable to be confounded with the true pulmonary sounds of respiration; the error may be avoided by directing the patient to open the mouth, if it have been previously shut, and *vice versa*. If the sounds heard have their seat in the lungs, they will suffer no change from this opening or closing of the mouth; if in the pharynx, they will be more or less modified in character. 9. Both sides of the chest must be submitted to precisely the same examination, conducted precisely in the same way, as already explained in reference to percussion. 10. Auscultation should never be considered complete, until the entire chest has been examined; it is often in some or other situation, where the symptoms would least have taught us to look for disease, that auscultation proves its existence. 11. In acute affections, auscultation should be repeated twice, at least, in the twenty-four hours.

FATAL DOSE OF SULPHATE OF QUININE.

In a late number (No. 113) of this Journal, we published a memoir by M. Briquet, on the use of sulphate of quinine, in large doses, in acute rheumatism. The following case, however, shows that this remedy cannot be employed in the doses mentioned by M. Briquet, without danger:—

A man, twenty-six years of age, was received into the Hôtel Dieu, under the care of M. Recamier, on the 27th of November, 1842, laboring under acute rheumatism. His skin was hot; pulse frequent and hard; no affection of heart or lungs; no headache; both wrist-joints were very much swollen and painful; the skin was slightly red; some pain also in the knees. M. Recamier, who had just seen a favorable example, in town, of the treatment with large doses of the sulphate of quinine, resolved on trying it in this case. He ordered forty-eight grains, in twelve powders, one to be taken every hour. On the following day the pain in the knees was less, but in the wrist-joints it was aggravated. The heart was carefully examined; no souffle could be detected, but its pulsations were less distinct than is natural. On the next day seventy-two grains of the sulphate were ordered, six to be taken every hour; but after the eighth dose the patient was suddenly seized with violent agitation, followed by furious delirium, and died in a few hours.

On examination of the body, marks of severe inflammation of the cerebral membranes were discovered. An analogous case, in which very dangerous symptoms supervened after the administration of four scruples of the sulphate in twelve hours, occurred about the same time in the wards of M. Husson.—*Gaz. des Hôpitaux*, December 8, 1842.

OXALATE OF LIME IN THE URINE.

The extreme rarity of crystalline deposits of oxalate of lime in the urine has often attracted the notice of writers on calculous affections, and many have expressed their surprise that, although they have repeatedly examined the urine in cases where calculi of the oxalate of lime exist, they have never succeeded in detecting a deposit of this substance. Dr. Golding Bird has published a communication in the "Medical Gazette," in which he states that he has directed his attention to the microscopic examination of the urine in many hundred cases of disease, and has discovered the comparative frequency of oxalate of lime in fine and well-defined octahedral crystals, and has ascertained a connection between the occurrence of this substance, and the existence of certain definite ailments, all characterised by great nervous irritability. He says, as the results of his experience, that the oxalate is of a more frequent occurrence in urine than the deposits of the earthy phosphates, and assigns as a reason for its escaping notice, that its refractive power approaches that of the urine.

To examine urine for the purpose of detecting the existence of the salt under consideration, allow a portion passed a few hours after a meal to repose in a glass vessel; if this be done in winter, or during the prevalence of frequent and rapid alternations of temperature, a more or less dense deposit of urate of ammonia will generally make its appearance, arising either from the sudden cooling of the urine, or from interference with the functions of the skin previous to its excretion. In warm weather, however, or when the functions of the skin are tolerably perfect, the urine, albeit it may be loaded with oxalate of lime, may still appear limpid, at furthest its lower layers only be rendered opaque by the deposition of a cloud of vesical mucus. Decant the upper six-sevenths of the urine, pour a portion of the remainder into a watch-glass, and gently warm it over a lamp; in a few seconds the heat will have rendered the fluid specifically lighter, and induced the deposition of the crystals of the oxalate, if any are present; this may be hastened by gently moving the glass, so as to give the fluid a rotatory motion, which will collect the oxalate to the bottom of the capsule. The application of warmth serves also to remove the obscurity arising from the presence of urate of ammonia, which, as is well known, is readily dissolved by exposing urine containing it to a gentle heat. Having allowed the urine to repose for a minute or two, remove the greater portion of the fluid with a pipette, and replace it with distilled water. A white powder, often of a glittering appearance, will now become visible, and this under a low magnifying power, as by placing the capsule under a microscope furnished with a half inch object-glass, will be found to consist of splendid crystals of

oxalate of lime in beautifully-formed octahedra, with sharply-defined edges and angles. It sometimes occurs that the oxalate is present in the form of exceedingly minute crystals; it then resembles a series of minute cubes, often adhering together like blood discs; these, however, are readily and rapidly resolved into octohedra, under a higher magnifying power. In three cases the oxalate was met with in very remarkable crystals, shaped like dumb-bells, or rather like two kidneys with their concavities opposed, and sometimes so closely approximating as to appear circular. These crystals are produced in all probability by a zeolitic arrangement of minute acicular crystals. They were ultimately replaced by the ordinary octohedral variety.

The crystals of the oxalate thus collected, are unaltered by boiling either in acetic acid or a solution of potass; in nitric acid they readily dissolve without effervescence.

In a great majority of cases the urine containing the oxalate was of a fine amber hue, often darker than in health, but in a few instances it was paler than natural, and then was always of lower specific gravity. The specific gravity of oxalic urine varies extremely; in rather more than half the specimens being, however, between 1.015 and 1.025. As a general rule, the heaviest specimens contained most oxalate. The acidity of the urine was well marked; not a case was met with in which an alkaline or even positively neutral state existed, and urea was generally in excess.

The source of the oxalate of lime found in the urine we are almost inevitably led to refer to the change of sugar and its chemical allies when taken into the system, into oxalic acid, in consequence of a disordered state of the digestive organs, more especially as when this acid is found in the urine, symptoms bearing no distant relation to those of a diabetic character are met with. At the same time the distinctive characters of oxalic and diabetic urine are essentially different. In the cases that occurred under Dr. Bird's observation, there was evidence of the positive and constant existence of serious functional derangement of the digestive organs, especially of the stomach, duodenum, and liver, and he ascertained further that the quantity of oxalic acid generated was to a considerable extent under the control of diet, some articles of food at once causing the excretion of this substance in very large quantities, whilst others appear to have the effect of nearly totally checking it. It must be borne in mind that an excess of urea and often of uric acid, was found in the urine in all these cases, and as there is a remarkable chemical relation existing between urea, uric acid, and oxalic acid, the former substances being readily convertible into the latter, Dr. Golding Bird considers it a legitimate conclusion that the disease be regarded as a form of azoturia (of which an excess of urea is the prevalent indication) in which the vital chemistry of the kidney has converted part of the urea into oxalic acid. He thinks, therefore, that the oxalate of lime is not produced from saccharine matter formed in the digestive organs, but is the result of the re-arrangement of the elements of urea, which, under the influence of disease, has been formed in great excess in the system.

HYDROGEN A METAL.

By M. DUMAS.

At the termination of his fourth lecture at the Sorbonne—the subject being hydrogen—M. Dumas announced the following striking views:—"Whatever it may cost me, gentlemen, in thus giving my opinion, I ought to express it fully. We ought no longer to consider hydrogen as a metalloid, or as merely approaching to a metal in any form, it ought to be classed by the side of metals or among metals. *It is a gaseous metal, even as mercury is a liquid metal.* If we suppose that it is impossible to liquify the vapor of mercury, that it is colorless, inodorous, and transparent as hydrogen, we shall have a correct idea of the views I wish to establish. By degrees you will learn to appreciate the correctness of this new theory, when, for instance, you study the different compound bodies of which hydrogen is a constituent. The *ensemble* of its properties approaches, in fact, to mercury and potassium."—*Echo du Monde Savant, and An. of Chemistry.*

A DRUGGIST'S PRESCRIPTION.

(Authentic.)

R Pulv. Rhei, ʒj;
Pot. sup. tart, ʒj;
Saponis Ven., ʒss. Misce; fiat pil. twelve, quorum
one vel two, nocte horis somni sumendus.

TRANSLATION.

"Misce, let them be well mixed up together; fiat pil. twelve, that is, make it into twelve pills; quorum one vel two, take one or two; nocte horis somni, of these pills the last thing going to bed; sumendus, every night.

Pulv. rhei. means Turkey rhubarb root.

Pot. sup. tart., cream of tartar pot.

Saponis Ven. is Venus's shaving soap."

[The accomplished author of the above rejoices in the name of Cyrus.]

DR. PROUT'S URINOMETER.

By J. G. RONKETTI.

Having received numerous inquiries from the country relative to this apparatus, we were induced to procure one ourselves and test its utility. We can now speak favorably of it from experience, and recommend it to all who are inclined to avail themselves of the indications derived from the state of the urine in various complaints.

REGISTER OF CASES OF INSANITY.

The association of medical officers of hospitals for the insane have published a form of register for cases of insanity. Sheets of this register, in numbers suffi-

cient to form books of any size (which should become the property of the respective institutions), may be had at cost price on application to Dr. Hitch, of the Asylum, Gloucester.

OBITUARY.

On Saturday last, in the eighty-second year of his age, Dr. G. Mitford, father of the accomplished authoress of "Our Village."

PROMOTIONS AND APPOINTMENTS.

December 18, 1842.

NAVAL.

Assistant-surgeons — Alexander Euston, to the Acheron; N. H. Pickthorn, to the Warspite.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, December 16, 1842.

M. Ward, T. J. Osborne, C. P. Daniell, W. T. Edwards, W. S. Watson, A. Stephens, J. Hancock, F. Wallis, R. Baker, W. Milner, P. Benson, A. King, H. R. Daniell, T. W. Fothergill, F. Hawthorn.

Monday, Dec. 19, 1842.

H. Hadlow, G. Newstead, H. Careless, J. Lugg, T. Howell, J. C. Blanshard, G. Holman, J. P. Oates, H. W. Best, G. Pink, T. Lyle, F. B. Hunt, T. Good, R. Cammack.

APOTHECARIES' HALL.

Licentiates admitted Thursday, December 15, 1842.

J. Southern, Ludlow; G. C. Dale, London; Richard Jones, Blakeney, Gloucestershire; S. Poyser, Wirksworth.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

We would beg to direct attention to the report of the proceedings at the Upton Union in connection with the cases of Mr. Morison and Mr. Sheward. Had we not been prevented by indisposition we should have made the conduct of the poor-law commissioners the subject of lengthened remark in our present Number.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.

LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

PROVINCIAL MEDICAL JOURNAL

And Retrospect of the Medical Sciences.

No. 118.]

LONDON, SATURDAY, DECEMBER 31, 1842.

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COURSE OF CLINICAL LECTURES, DELIVERED AT THE MIDDLESEX HOSPITAL. BY DR. WATSON.

Lecture X.—December 17, 1842.

GENTLEMEN,—Although sixty-three patients were discharged from the hospital on Tuesday, the 6th inst.—the largest dismissal that I remember in any single week—so many new patients were admitted during the ensuing week, that only a few beds were left vacant for me on Tuesday last; and as many applicants were rejected, I believe, from want of room, as were actually received into the wards.

The number actually admitted by me has been fourteen—six women and eight men. I proceed, according to my custom, to give you a summary account of these.

Mary Ann Reavely, twelve years and a half old, presents a very striking example of severe chorea. She was brought into the admission-room in a state of violent and universal jactitation. Her mother, assisted by two other women, could not hold her; she writhed, and twisted, and threw her limbs about in all directions, and with great force; her hands were bruised by the blows, which she could not be prevented from striking upon the objects near her. I never saw but one other patient in this disease whose contortions were so strong and incessant; that other patient was also a female, in this hospital, older than our present patient, being between sixteen and seventeen. It was with extreme difficulty that she could be kept in bed. Reavely, with all this bodily restlessness, was quite rational and collected; but she spoke with difficulty and many grimaces, yet answered questions pertinently; when asleep, she lies still, her mother states, but even then the tendons of the limbs are observed to start a little.

She had been in this condition of extreme jactitation for a week. She had been sent home from school four or five weeks before, because she could not hold anything in her right hand, which shook much; then her right foot and leg began to move involuntarily. Her mother had noticed, for some time previously, that the girl's handwriting, in the letters she received, was unsteady and altered; and she had been thought, all the summer, unusually fidgety. A fortnight before her admission two teeth had been extracted—two, I believe, of the deciduous teeth, her mouth being much crowded; she had also been purged without any apparent benefit. Menstruation has not yet happened, as may be expected from her youth; but she suffered a good deal of pain in the hypogastrium in the summer. No cause is known for the presence of

the disease. When an infant she was troubled with thread-worms.

As her bowels had not been relieved for three days, I directed five grains of calomel at bed-time, and three drachms of castor oil with three drachms of oil of turpentine next morning; this was followed by four stools, which did not contain any worms. She is much quieter, but still there is considerable jactitation; the left side is much relieved, and less agitated than the right—and perhaps we should expect so much, that the disease should withdraw first from the part last invaded, while to the right side, where it began, it still clings. As she has no pain or fever, I have prescribed tonics—the sulphate of zinc in gradually increased doses, commencing with three grains, to be taken three times a day, and to be increased until the doses shall have reached to as much as she can properly bear. We shall watch the progress and issue of this case.

The boy Field, whom I mentioned before, and who also has chorea, is better. I see two or three other cases of the same malady in the house, patients of my colleagues. It ought to be profitable to you to watch and compare these cases, to mark their points of agreement and points of difference. On account of the propensity which persons affected with this malady have to irritate and aggravate each other's symptoms, we put them, whenever we can, in different wards.

Mary Ann Abercromby, aged seventeen, presents another instance of that fearful complication of articular rheumatism and cardiac disease, which I have so many times had to notice. It rarely happens that an admission-day does not bring us in one or more examples of it. She complains of palpitation, of shortness of breath, and of pain round her waist, also of a sensation of bearing down. The catamenia have been absent since August last; she had then menstruated four times in all.

There is loud, slow, systolic bellows sound heard with the systole of the heart; it is audible over a large space, and nearly as loud at the apex of the heart as at its base; the second sound is loud and clear.

There is a part of the history of her case which does not appear on the present case-book. This girl was here, under my care, in June, 1840, with acute rheumatism; her knee joints were, at that time, distended with liquid; and her heart made then the same unnatural noise as at present; and I see it noted, in the old case-book, that the bellows sound was louder towards the apex of the heart and the left side than at its base and towards the right. This makes it probable that the bruit depends upon disease of the mitral orifice. But we trace her malady still further back. Three or four years before her first admission, and when she could not have been more than eleven or twelve years old, she first had rheu-

matic fever, and from that time she had been subject to palpitation and panting breath, so that she was obliged to stop and pause when going up stairs. Since her dismissal from the hospital in 1840, she has suffered two recurrences of acute rheumatism, the last in August of this year.

Here we have rheumatism occurring at an early age, and, what is almost a constant companion of the joint disease at that early period of life, carditis, and incurable damage to the heart. We can only palliate and protect in such cases. This patient was bled from the arm last week, prior to her admission, and the bleeding immediately relieved headache, which she had been suffering. Rest, the avoidance of stimulating food and drink, protection against the influence of external cold—these are the advantages which the hospital furnishes her; and great are these advantages to the humbler classes. She is aware of these benefits; she has been in St. Bartholomew's and in University College Hospital, and she will most probably pass a great part of her life in such places. I have prescribed some diuretics and put a belladonna plaster on her præcordia—the one for the purpose of relieving the pains in her joints, the latter in the hope of quieting the uneasy beatings of her heart.

On the case of Eliza Bevan I have very little to say. She is aged twenty-two, a married woman, mother of two children, and now five months gone with child. She complains of pain in her limbs, so severe in the lower limbs as to prevent her walking. It is not a case of distress from gravid uterus, but is probably syphilitic. She denies having ever had any sores, and says that her husband had none; but her pains were preceded by a thick pustular eruption on her face, body, and extremities, and her husband had had a similar eruption, and was a patient of Mr. Shaw, whose opinion was that it was of syphilitic origin. Her pains are already departing under the use of the iodide of potassium and the decoction of smilax aspera. As she is so far advanced in pregnancy I shall dismiss her as soon as I can.

Mary Anne Crawford, a girl, aged nineteen, with very pallid face and very faint colored lips, complains of debility, of shortness of breath on ascending, and of palpitation of the heart. These symptoms are the same as those of Mary Anne Abercromby, but the cases are very dissimilar. Crawford complains also of pain in the lower part of the abdomen, and in the loins and chest, all of long duration. Her bowels are costive; she voids pale urine; she does not fancy animal food; the catamenia are reported regular, but the discharge is scanty, green-colored, and attended with pain.

This is a case of anæmia—of what used to be called chlorosis. There is a deficiency of red blood, and that feeble and irregular performance of various functions of the body which results from such deficiency.

In general, as you must have discovered from your observations here, we feel but little anxiety about such cases. Under the use of aloetic purgatives, of a nutritious diet, with the shower-bath, and exercise in the open air, and some preparation of steel, such patients generally regain their color and get quite well. As one of my colleagues quaintly describes the process of cure—"We wash them, and air them, and iron them—and they recover." But you ought to be aware

that this anæmic condition, though of no serious import in itself, may mask graver disease, as I fear it does in this young woman. The right subclavian region is comparatively dull on percussion; the respiration is louder and more tubular there, and the voice more resonant than in the corresponding space on the other side of the chest. I fear she has some tubercular mischief in progress in her lungs. Be it so or not, whatever remedies the anæmia and strengthens her general health, will be likely to obviate or retard the multiplication or enlargement of any tubercles that may exist. The two morbid conditions do not imply any contraindications in the treatment. She is taking already, with advantage, the compound decoction of aloes and Griffith's mixture, in equal parts, three times a day.

Margaret Demsey is a single woman, aged thirty; has been a servant, but long out of place. She complains of tightness of her chest, shortness of breath, and wheezing, especially at night, with some expectoration of phlegm in the morning; she never spat blood; she is very subject to cough and short breath, especially in winter. She has been more ill than usual for the last six weeks, has grown thin, and sweats at night.

Here the symptoms—what are termed the rational symptoms—and the history would lead one at first to fear that phthisis was developing itself; but a more particular examination, made the next day, showed that the malady is of a different kind. She may have tubercles also, but I hope and I think she has not.

First, the catamenia are reported regular; next, her pulse is no more than 72; both these are presumptions (no more than presumptions) that her case is not one of consumption; but further, we find by auscultation no evidence of tubercles; the chest is everywhere uncommonly resonant, and the respiration is everywhere very feeble and indistinct. Notwithstanding her wasting you see no prominence of her collar-bones; all those are physical signs of *pulmonary emphysema*. You know what that condition is. The air-cells of portions of the lungs, sometimes of large portions, are permanently dilated; several, perhaps, are ruptured, and break into one large cell or cavity; the lung does not collapse thoroughly on expiration; the air stagnates in the diseased parts; the play of the thorax is limited; the patient has less than the requisite quantity of lung to breathe with; her breathing is always short and imperfect, and whenever a slight catarrh befalls her, her embarrassment is sensibly increased; the air at rest in the spongy tissue yields no sound to the listening ear, but the chest gives out even an exaggerated resonance when struck by the fingers.

This state of lung leads to an obliteration of many of its blood-vessels, and that again to dilatation of the right chambers of the heart, and that again to dropsy. The process may be slow, but such is always the tendency. Medicine can do little for such cases; we cannot restore the broken tissue to its natural state. The patients are in the condition of broken-winded horses; warmth benefits, or rather, cold injures them; they are always better in summer; a warm climate suits them. This *emphysema pulmonum* is one of the conditions upon which spasmodic asthma is very apt to engraft itself.

This patient, being at rest, and in a warm room, is already much more comfortable. She is taking the *haustus scillæ compositus* of our hospital pharmacopœia.

Mary Wright, aged about forty, gives but a rambling and confused account of herself. She complains of pain in her head on its left side and back part—pain which comes and goes several times a day, and is attended with throbbing and giddiness. But she adds, that all her life she has been subject to these symptoms in a less degree; I fear, however, that some chronic mischief is at work in her brain. Five or six weeks ago she seems to have had something like a fit, or a strong threatening of one; she had then more than usual pain and vertigo, could scarcely stand, and her articulation was embarrassed. She was cupped at that time with advantage, and the cupping has been since repeated. There is some comparative debility of the left limbs; the bowels are irregular, sometimes costive, sometimes lax; the catamenia have recurred uncertainly and irregularly during the last twelve months, and from her period of life we may expect that they are about to cease.

I have prescribed a mixture of gentian and senna, to be taken twice a day, with milk diet. The future treatment must be guided by the progress of the case.

These are the six women who have been newly admitted. I shall now turn to the men, on whose cases I shall have but few observations to make at present.

Charles Browning, aged nineteen, is a shoemaker. He complains of pains in his limbs, on the right side chiefly, and which are worse at night, preventing sleep; he has a distressed countenance; his tongue is of an intense red at its tip and edges, and is sprinkled irregularly with a white fur; he has had no shivering nor sore throat, but has been very feverish. He has been ill a week, and attributed his illness to having put a wet carpet over himself in bed, for increase of warmth, two nights before he felt attacked. Yesterday we found him with pain and tenderness of the left elbow and shoulder joints, but complaining grievously of his right hip, which is painful and tender, and a grating sound is perceptible to one's hand applied over the joints whenever he attempts to move the limb, which he keeps flexed upon the pelvis; his pulse is frequent. He has been cupped on that hip, and is taking colchicum. This is an acute case, and it will be worth your while to watch it. Whether there be idiopathic inflammation of the joint going on, or the specific inflammation of rheumatism, a day or two will determine. I should tell you that he has had no blow or fall; and Mr. Tuson is of opinion that the grating sensation which can be felt in the hip is owing to a dry state of the synovial membrane.

Robert Burridge is a young man, aged about twenty-one, a draper from Ripley in Surrey. He has entered the house with an anxious aspect, tremulous limbs, lips, and tongue. His illness, he says, has been of a month's duration, and began with headache and shivering, and has been attended with delirium. It would seem a case of continued fever, and that conjecture is strengthened by his statement, that fever has been prevalent at Ripley. His bowels are open; his stools are reported loose; he has been distressed with nausea and retching.

The next day, the day after his admission, it was found that his urine was neutral; his pulse 108, and small; his lips were dry; his teeth brown with sordes; his bowels confined. Yesterday the tremor and sickness continued. He is taking a draught in a state of effervescence, with some dilute hydrocyanic acid, and I have ordered him a good allowance of beef-tea. This is an example of low fever. Considering the stage it has reached, and the freedom he now shows from any serious affection of the brain, I trust he will recover. The nausea and vomiting are his worst symptoms; his present condition is such as to require cautious support. I think it probable that it will become proper to give him wine.

Henry Parry, the patient who speaks in whispers, is full of scrofula, but he is laboring also under an attack of acute inflammation. On Thursday week he began to have pain in the left side, near the edge of the ribs, and increased shortness of breath. These symptoms may have denoted a variety of things. But he had had cough and expectoration for at least twelve months, and, more than once, slight hæmoptysis; he had wasted, too, during the same period, and suffered nocturnal perspirations. The night before his admission he was bled from the arm, with relief to the pain, but a deep inspiration still gave him much pain. The next day, upon examining him in bed, I found dulness on percussion, resonance of the voice, a creaking noise during respiration, with some gurgling—all in the left subclavian region. There is, unquestionably, a tuberculous cavity at the upper part of the left lung; he has, besides, scrofulous disease of the jaw, which Mr. Arnott has examined, and reported to be susceptible of no local means of cure.

On the 14th I thought I could detect a slight to-and-fro sound; but on the 16th this, if it really existed before, had disappeared. There remained, however, a distinct grating noise, which accompanied the movements of respiration, and he is himself aware of a grating sensation below the scapula. The grating sound, I have no doubt, is produced by the rubbing of the opposite sides of the pleura, antecedent to adhesion. Pleurisy, you know, is a very common epiphenomenon in tubercular phthisis. We almost always find after death by that disease, without perhaps one exception in a hundred cases, that the lungs are adherent to the ribs. Probably in all cases a friction sound exists while these adhesions are about to form, but it soon ceases from the agglutination of the opposed surfaces, and unless auscultation is practised at the very time, this sound is not detected; it occurs, no doubt, much oftener than it is noticed, as a sign of this dry pleurisy.

Robert Derry is the next; he is forty-seven years old; a sawyer by trade. In this man we have many well-known symptoms of disease of the heart—shortness of breath, and cough, to which he has for some years been subject in winter; inability to lie down flat, so that he is accustomed to sleep as he sits, leaning his head on a table; œdema of the lower extremities; a livid color of the face and lips. These are symptoms which pathologists of a former but no distant day set down as infallible signs of *water on the chest*, by which they meant effusion into the cavities of the pleuræ or pericardium. There is no effusion into the pleura here; for percussion gives a clear

sound down to the very bottom of the cavity posteriorly, and respiration can be heard, mixed, indeed, with coarse crepitation to the same depth; the lungs are, like the legs, anasarctous; I do not think there is much, if any, liquid in the pericardium; wheezing and snoring respiration is audible throughout the chest; there is no albumen in this man's urine; it is not a case of renal dropsy; his lungs are probably emphysematous. Diseases of the lungs and of the heart mutually influence each other; whether the lungs were in this case primarily affected, or the heart, the present symptoms and the ascertained history of the patient do not enable us to determine. Venesection to the amount of ten ounces was performed on the evening of his admission; the blood did not exhibit any mark of inflammation. The case is a very unpromising one however. I am giving him diuretics.

Richard Hartley, aged forty-two, is a house-painter; he is the third house-painter I have admitted within the last month. The two former came in, you will recollect, with colica pictonum. This man presents you with another common effect of the poison of lead, which I alluded to when noticing those cases. He has "dropped wrists"—lead palsy; great debility, and imperfect paralysis of the extensor or muscles of the hands and fingers; the wrists have been more or less weak for the last four or five years; this is a curious consequence of the slow introduction of lead into the system. His occupation as a painter indicates that cause, and as a confirmation of its being the cause, we have the slight edging of blue on his gums; these sufficiently stamp the palsy as depending on the introduction of the poison of lead. With this local paralysis there is also mixed up a degree of rheumatism, and this must be the first object of our treatment. It is a matter of regret that workmen who are exposed to this source of disease, whereby so many are permanently crippled, do not adopt Liebig's hint of drinking habitually what he calls "sulphuric lemonade." I see in this day's "Lancet," that this preventive has been tried in a large white lead manufactory at Birmingham, with remarkable success. The poisonous *carbonate* of lead is converted into an insoluble, and therefore harmless, sulphate.

James Mac Gouran is aged forty-four, and entered with head symptoms. A fortnight since he had a "fit," which, by the description given of it, appears to have been epileptic. He has had several similar attacks since, and is still stupid, confused, and somewhat incoherent, in consequence of the last. He complains of headache and giddiness, and has been intemperate. There is an episode in his history, which may, or may not, connect itself with his present state. Twenty years ago he was kicked on the forehead by a horse, and then had a succession of similar fits for several days; since that time till the present he had none; he is quite unconscious during the paroxysms, struggles a good deal, and on recovering remembers nothing of what has been passing. These, you know, are characteristics of epilepsy. He had been freely bled before admission; his pulse intermits occasionally. On the whole, I am inclined to think, that though the period of that injury is very distant, and any external symptoms of its effects were so long suspended, there has been all that time some mischief

going on—some slow and insidious alteration in the skull.

On the two remaining men I have no remarks at present to offer. Daniel Hayes appears to be laboring under a very slight feverish cold. He suffers very little pain, has a quiet pulse, and urine natural; his skin also is cool, and I hope in the course of a week to dismiss him quite well. John Fruin is troubled with palpitation, but I can detect no organic disease of the heart. He also was subject to "strong fits," between the ages of seventeen and twenty; he is now thirty-two. Such is a very cursory account of our new patients. Next Saturday, Gentlemen, will be the day before Christmas-day; I cannot expect to see many of you here at that time. These lectures will, therefore, for the present at any rate, be suspended.

STRANGULATED FEMORAL HERNIA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Should the following case be deemed sufficiently interesting to your readers, it is at your service for insertion in the Provincial Medical Journal.

I am, Gentlemen,

Your obedient servant,

JOHN PRANKERD, Surgeon.

Langport, Somerset,

Dec. 21, 1842.

On September 1, I was called on by a poor woman, who stated that a neighbour of hers had been very ill for five or six days, continually vomiting a very fetid matter, and that her bowels had been confined for a similar period. I, of course, called on her soon after, and found my patient to be a single woman, by name Ann Abbott, aged sixty-three, accustomed to laborious work in her house and garden; she has been the subject of hernia three or four years, which she has hitherto reduced herself, and never wore a truss. Examination proved her to be laboring under strangulated femoral hernia of the right side, which had existed six days, the contents of the sac having protruded whilst lifting a heavy weight of potatoes; I understood that she had almost immediately after been seized with vomiting, and had continued so incessantly ever since; the smallest quantity of liquid taken was rejected, accompanied by stercoraceous matter. The tumor was now exquisitely tender; the slightest touch seemed too much to be borne, the whole abdomen was tense and painful; the pulse very small, weak, and frequent, with general fever and restlessness. Under such circumstances the case appeared almost hopeless, and an operation to offer little chance of success. Finding I could not have recourse to the taxis, from the extreme pain, I placed her in a warm bath, where she was kept nearly an hour, until syncope partly occurred, when I attempted the reduction, but the great pain obliged me to desist, and my efforts failed in reducing the tumor. Glysters were administered, but returned unaltered; and opium was rejected. Desiring a cold application should be applied to the tumor, I left to obtain some assistance to perform the operation, if on consultation it was deemed desirable. On my way home, I was summoned to a pressing case of midwifery, which kept

me engaged several hours, so that I did not return to my first patient until full eight hours after having left her. On my arrival, I found things much in the same position, except more fatigue and disinclination on her part to have any remedy tried. I now decided on bleeding her freely, which I had hesitated to do previously, from the apparent great exhaustion and the consideration that I might hasten gangrene by weakening the powers of life; I accordingly opened a vein in the arm, and when about twelve ounces had flown, perfect syncope occurred; I heard a slight gurgling, and with gentle taxis the whole contents of the sac were returned into the cavity of the abdomen. A full dose of castor oil was given as soon as the state of collapse succeeding had been removed by slight stimuli; this being rejected, I administered other aperients, which moved the bowels in about four or five hours, and she went on well from this time with scarcely any symptoms requiring treatment.

The only point of interest perhaps in this case may be the long period of incarceration of the contents of the sac (nearly seven days), together with the absence of adhesions, which would have been expected from the continued inflammation, and its publication may serve to illustrate the difficulty surgeons sometimes have in deciding on the exact time of giving up measures for reducing strangulated hernia, and having immediate recourse to an operation. It is now well understood that the earlier we operate the better, but the above detail may serve to show to what a period such symptoms may go on without the death of the patient. Had any medical friend accompanied me on my first attendance, I should have been inclined to operate at once, being satisfied that no delay should ever occur in relieving symptoms so urgent, and when other remedies fail, harm is done by the loss of time. Baron Larrey mentions a case in which death occurred in two hours from the strangulation; and Mr. Hey two cases where the disease proved fatal in about twenty-four hours. In this case the usual symptoms which point out its immediate necessity were present, but the unintentional delay most probably saved the patient a painful and dangerous operation, which, under the circumstances, held out few prospects of recovery.

It may seem strange to some of your readers the long delay in my being called into the patient, which may be explained by the circumstance of her living with a bedridden sister between two or three miles from my residence, and the neighbours being ignorant of and indifferent to her state.

DIAGNOSIS OF CHOLERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In conformity with the intention expressed in my letter of the 1st inst., I now proceed to a more detailed account of some of the statements therein contained. In doing this, I will deviate so far from the ordinary course pursued in medical writings as to reserve till the last what I have to add on the origin or causation of the disease; my reason for so doing being the conviction that, in a disease so anomalous, it is not only legitimate to disregard established usage, but further, when the more peculiar

features have been duly discussed, much irrelevant and tedious repetition will be avoided. Feeling persuaded that enough has already been said to prove the “irreconcilable” difference between English cholera and the Asiatic or malignant disease, I shall pass at once to the examination of the first statement, which appears to call for comment—viz., “diarrhœa and vomiting may, or may not, be present.”

My object in pointedly making the above assertion was to convey the idea that, although of almost universal occurrence at one or other period of the disease, diarrhœa and vomiting do not act the part in the production of collapse generally assigned to them; and also to lead to the more important conclusion, that the practitioner who rests satisfied with arresting them has performed but a portion of his duty. To this it will be necessary to revert when considering the treatment. In confirmation of the foregoing statement, I have at this moment in my recollection three cases, wherein the patients were in the state of collapse within an hour of the first feeling of indisposition, and where neither diarrhœa nor vomiting had preceded such condition, although these symptoms in their least equivocal form supervened. Again, if we regard the character of the matter discharged, of what do we find it to consist? Certainly not of the matters usually met with in English cholera, or dysentery, but, on the contrary, of the soluble parts of the blood blended with the secretion proper to the intestinal canal, in a state of partial solution and partial coagulation, to the presence of which (mucus) the term rice-water has been not inaptly given. That the immense discharges are, in reality, derived from the source above mentioned will be self-evident, when we arrive at the consideration of the state of the circulation, whether we regard the condition of the blood met with in the vessels, or that abstracted from the body during life. There is yet another peculiarity connected with the diarrhœa, which is the immense force with which the discharge is effected, and which seems to depend on the violent or spasmodic contraction of the muscular apparatus of the intestines, and the total inability of the sphincter to counteract it. This must have been observed by every man who has had the opportunity of seeing the disease, and, in confirmation of its truth, I would particularly advert to my own case. The same remark to a certain extent applies to the vomiting.

I shall now notice the suppression of the secretions of the liver and kidneys, not that this may be next in importance, but because it is more immediately connected with the natural functions, and forms a most prominent diagnostic feature in the disease. That this symptom is to be regarded in the light mentioned does not admit of question, as every man who has practical knowledge of the disease can testify. It only, therefore, is necessary for me to explain a little more fully a remark already made—viz., that this suppression of the secretions of two such important organs is universally present, and that it arises from their inability “to act upon the morbid fluid circulating through them.” That this suppression is actually what its name implies, has been most abundantly proved by post-mortem investigations, the almost invariable result of which has been the totally empty and collapsed state both of the gall and urinary bladders. To this there is, however, one

exception, and this should not be passed over—viz., where such examinations have been made after reaction had taken place, and where that most fatal of all causes, cerebral congestion with consecutive fever, proved the cause of death, and where, in fact, a new disease had occurred. That the blood circulating through the liver and kidneys is altered in constitution physically and chemically, cannot be denied, and is, therefore, unfit for the purposes to which, in its healthy state, it is destined, may be safely inferred. That this explanation might in itself suffice to prove the assertion made, seems apparent; but another fact, and one of paramount weight, may be added—it is, that these organs which suffer in common with all others dependent on the ganglionic system of nerves for their integrity and power of action, are still further incapacitated for the discharge of their parts in the economy by the abstraction or subversion of such nervous influence. This will be further illustrated when we arrive at the consideration of the derangement of the nervous system.

The next point which claims attention is the extraordinary diminution of the heat of the body. This is deserving of remark on many accounts, and not least so as going far to destroy the idea of cholera being the consequence of an irritative or inflammatory state of the system. It is also to be remembered that this coldness is not confined to the surface of the body, but is even more remarkable on touching the tongue, which, so far as my experience extends, is universally cold and clammy. That this symptom depends upon some cause more immediately connected with the laws by which the generation and evolution of animal heat are governed, can hardly be a matter of doubt. Although how or in what manner such derangement is produced is involved in the greatest obscurity, and must so remain until the subject of animal heat is better understood than at present. Conceiving that nothing acts so prejudicially to the real advancement of medical science as the indulgence in hypothesis, I shall not stop to inquire into the doctrines at present entertained on this subject by either one or other party, but will rest satisfied with stating my belief that this symptom, in common with others, may be fairly attributed to the defective and disordered state of the nervous, the respiratory, and circulatory systems—on the due performance of which functions I also believe the generation of animal heat itself to be mainly dependent. If this opinion be erroneous, and the production of animal heat be referable to mere physical and chemical agency, independent of vital or nervous influence, why does not this extraordinary process continue after dissolution, when such causes are no longer interfered with, or interrupted by that principle which, during life, seems to keep them in abeyance?

The next point requiring attention is the state of the respiration. As stated in my first letter, we find it slow, feeble, and the air expired cold; the parietes of the chest scarcely moving; and, so far as my observation enables me to speak, such disordered state never accompanied by stertor. I here confess with regret that I never, during the prevalence of the disease, endeavoured to ascertain the quantity of carbonic acid emitted on expiration. This condition of the respiration I have noticed in many of the more aggravated

cases from the very commencement of the disease, which confirms me in the opinion already expressed—viz., that the blood, owing to such impaired action of the lungs, does not undergo the change in them by which it is rendered fit for the purposes of life; or, in other words, from the partial expulsion of the contaminated air in these organs, the ingress of a due proportion of fresh atmospheric air is effectually prevented; and, hence, instead of oxygenated or arterialised blood, we have a literally poisonous fluid circulating through every organ of the body, as is most abundantly demonstrated by the dark and tarry appearance of the blood, more especially of the portions first drawn by venesection, and, where this means is practised with success, the gradual improvement in appearance of that which flows subsequently. Of this it will be necessary to speak when considering the state of the circulating and nervous systems, which I shall take the earliest opportunity of doing, as by such extension of the remarks contained in my former letter, I hope to succeed in divesting them of the character of mere assertion.

I am, Gentlemen,

Your obedient Servant,
GEORGE FYFE.

Newcastle-upon-Tyne,

Dec. 26, 1842.

INFLUENCE OF MENTAL IMPRESSIONS ON THE FŒTUS IN UTERO.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—For the facts of the following case, which has recently occurred in my practice, I can vouch; though how far they may tend to support the opinion long controverted, but adopted by many, that the effects of maternal fright may be developed in the organisation of the fœtus in utero, I must leave to your numerous readers to decide.

I am, Gentlemen,

Your obedient servant,
W. J. TUBBS.

Upwell, Norfolk, December 21, 1842.

In the early part of August, 1841, I was requested to attend the wife of an innkeeper, in labor with her eighth child. She was a strong, healthy woman, aged about forty-seven. The os uteri was dilated to the size of half a crown; membranes unruptured; vertex presentation. The labor being tedious, it was necessary to rupture the membranes, which, from their toughness, and not yielding to the finger nail, was effected by a quill. There was much mental excitement during the greater part of the labor. Fearing cerebral congestion, and from the rigid state of the os uteri and the perineum, it was almost decided that venesection should be had recourse to. Though repeatedly told all was right, she persisted in a contrary opinion. As her pains increased, so did her ideas, that her child was like the spotted dog by which she had been frightened in the kitchen; as it was always before her eyes, night and day. (These were the words of the patient.) She had scarcely uttered those words, when, by a powerful contraction of the uterus, a fine full-grown female child was expelled.

Before the child was taken from under the bed-clothes, the patient distinctly said these words in the presence of the nurse and a second attendant: "My child is marked like Troughton's dog (the spotted), and at the back of the neck where the black one held it." On bringing the child to the light, such was the fact; only three or four spots about the size of a sixpence on the face, the rest of the body beautifully marked with black spots varying from the size of a pea to that of a sixpence, with the exception of the back of the neck, which had a brown black appearance covered with hairs, extending about two inches and a half across the neck and shoulders, and one inch and a half down the back. It appears from the patient's statement, that about the period of her third month of pregnancy, she was crossing the kitchen with a pint of beer, when a black dog and a spotted terrier, then lying under the table, began to fight close to her feet; and in the fright turning round, she saw the black dog seize the other by the back of the neck: a chillness came over her, and she felt ill all the day. What is singular, her last two children were born marked from mental impressions made (as she believed) about the third month of each pregnancy; therefore, she was more convinced that she was to have a spotted child this time. The child is living, and very much admired. The spotted dog frequently passes my house; many persons call at the inn for a pint of beer as an excuse to see the rare spotted lass. A few days after birth the child was seized with convulsions from retention of the meconium, which symptoms were soon removed by the attention of my assistant, Mr. Fysh.

CASE OF TETANUS SUCCESSFULLY TREATED.

By Dr. P. J. BAUDUY, Cuba.

Manuel de Alma, aged twenty-five, a stout strongly constituted young man, a laborer, and very healthy, about twenty days ago, while propping up a post, fell in the hole which had been dug to receive it, and a small splinter three-quarters of an inch long, and as thick as a pin, was driven under the integuments of his left thigh, between the Sartorius and triceps adductor muscles. A few days afterwards he felt slight pain in the wound, and found that a small quantity of pus has collected about the splinter. He gave vent to it, but still did not extract the extraneous body. About eight days after he began to feel much uneasiness about the jaws, and this rapidly increased to rigidity and difficulty in opening them freely. He was now advised by his friends to cease working and consult a physician; but, regarding their fears as foolish, he continued at hard work for several days more, until last Sunday, October 21, fifteen days after the injury, he got on his horse and rode to the neighbouring village to consult a physician. Upon arriving there he was suddenly seized with a strong convulsive spasm of the whole body, and fell from his horse. He had to be carried home and put to bed, as the spasms continued at short intervals.

Oct. 23. His friends finding that he was growing much worse, sent for me to consult with his attending physician. The following is the state he was

in:—No fever; pulse natural; skin rather more hot and dry than natural; great rigidity of jaws, cannot open them more than an inch; great anxiety of countenance; rigidity about all the muscles, moving the jaws and larynx; great difficulty in swallowing; his bowels have not been opened since three or four days; can pass his urine only with the greatest difficulty; great rigidity of limbs; no opisthotonos visible; every two or three hours he has the shooting pain from præcordial region to spine (so characteristic of this disease), accompanied by strong spasms of all the muscles of the trunk, the extremities not being involved; belly hard and tense; dull sound on percussion, except over the sigmoid flexure of colon, where there is some tympanitis; recti muscles contracted, rigid, and very hard. His physician is treating him with antispasmodics, chiefly musk and assafœtida. I proposed a more active treatment, but as we could not agree, I thought it best to withdraw.

24. To-day the friends of the patient, as well as himself, being dissatisfied with the attending physician, and finding that the disease was fast advancing towards a fatal termination, dismissed him, and sent for me to take charge of the case. This I at first refused to do, through motives of delicacy towards a fellow practitioner, but was overruled by the strong desires and entreaties of the patient and his friends. Saw him then at five, p.m., of this day. Found all the bad symptoms increased; can no longer pass his urine; can scarcely open the jaws at all; spasms stronger and more frequent; has had no stool; considerable anxiety of countenance; can swallow, but with the greatest difficulty and suffers excruciating pain. I immediately dilated the wound freely (the splinter has been extracted only a few days before by his physician), and applied to it *the actual cautery*, and ordered hot emollient cataplasms to be kept over it. An injection of oil of sweet almonds, Castile soap, and molasses, in which a clove or two of garlic should be bruised, to be given immediately, and repeated every four hours until the morning; frictions of hot oil, with bruised garlic, over abdomen and throat, and cataplasms of tobacco over pubal region, in order to overcome the spasm of sphincter of bladder. Ordered him for next morning a pill of ten grains of the sub-nitrate of mercury—a medicine of much power much used in this country, to which I believe its use is almost entirely confined; it is powerfully emetic, cathartic, and diaphoretic; its effects in traumatic tetanus are often wonderful, and, altogether, it is a medicine possessed of such important powers as to merit much attention. It is an empirical remedy, but one that deserves to be tried by the profession. I propose, on some other occasion, to furnish the readers of your Journal with an account of its powers, and the diseases in which I have found it useful. Ordered, likewise, frictions of hot oil, in which should be dissolved nitrate of mercury, one grain to the ounce, to the abdomen, thighs, knees, neck, jaws, and inside of shoulders, to be repeated every three or four hours. Lukewarm water, with a few drops of spirit of nitrous æther, for drink.

25. Saw him about one, p.m. The nitrate of mercury produced copious vomiting and four or five large faecal evacuations; has passed his urine without much difficulty, and in large quantities; is perspiring pretty

freely; belly much softer; says he feels much better; has had no shooting pain from sternum to spine; looks much more cheerful; pulse natural; slight thirst. Ordered a small blister to be put on the wound; ordered two or three purgative injections to be given in the course of the afternoon.

Eight, p.m. Saw him again. Injections produced two copious stools. Gave him half a grain of sulphate of morphia; ordered frictions of nitrate of mercury to be continued, and ten more grains of the same to be taken early next morning.

26. Eight a.m. Slept well last night, but suffered from slight difficulty in urinating. Took the nitrate of mercury at five, a.m. Has vomited but once, and has not been purged; belly a little harder; has had slight returns of the shooting pain from sternum to spine; is bathed in perspiration; is more dejected—says he will die. Ordered a purgative enema every hour till he evacuates freely, and frictions of nitrate of mercury to be continued.

Six, p.m. Profuse perspiration still continues; complaints of tongue; lips and whole mouth paining him; pulse 65, soft, rather irregular; belly much softer; has urinated freely, and had several large evacuations; opens his jaws nearly as well as in health; tongue coated with white fur, edges and tip red. Ordered another purgative injection; frictions still to be continued; tobacco cataplasms to abdomen; sulphate of morphia half a grain, every hour.

27. Five, p.m. Passed a good night. Had several stools, and complaints of tenesmus, and passes blood in the evacuations; urinates very freely, but has still very slight pain; belly quite as soft as natural; has had but very few and very slight shooting pains from sternum to spine; opens jaws freely; swallows easily; cheerful; much thirst; pulse 84, soft, regular; tongue coated with thick white fur; complains much of mouth and throat; craves for food; blister on wound has had no effect but that of causing abundant suppuration. Sulphate of morphia half a grain, to be continued every hour; frictions to be still continued, and tobacco cataplasms. As I think that there is now slight opisthotonos, I ordered strong tartar emetic ointment to be rubbed in between shoulders. Injections of starch, with half a grain of sulphate of morphia every sixth hour, if evacuations continued. Basilicon to the wound. Weather since yesterday morning very unfavorable—cold north-easterly wind, with continual showers of rain.

29. Could not see him yesterday on account of continued heavy rain. To-day, at ten, a.m., found him better; no shooting pains; jaws open quite freely; no opisthotonos, but belly is harder, and there is considerable difficulty in urinating; bloody stools were stopt by the injections on the night of the 27th; profuse salivation; mouth, gums, and lips very much swelled, full of small ulcers; tongue covered with thick fur, edges very red, and small ulcers on them; slept very well last night; not much thirst or appetite; pulse 72, soft, regular. Ordered frictions of nitrate of mercury to be stopt; one ounce of castor oil to be given, and hot tisan of elder blossoms and borage leaves, with sweet spirits of nitre, a drink. Frictions of hot olive oil, spirits of ammonia, and tincture of opium over jaws and throat. Frictions of tartar emetic to be discontinued, as pimples are very numerous

and sore. Gargles of lead water and infusion of rose leaves. Sulphate of morphia, half a grain every six hours.

31. Ptyalism still continues, but less; mouth less swelled, less painful; tongue coated with thick white fur, resembling coat of white lead paint, blackened in many places by gargle; jaws open naturally; belly still hard, much difficulty in passing the urine; bowels regular; no thirst or appetite; chest very prominent, and some rigidity of muscles of back; no shooting pains; no opisthotonos; pulse 72, regular. Ordered a few drops tincture of valerian to be added to his tisan; sulphate of morphia, quarter of a grain; camphor three grains, every three hours. Emollient fomentations over pubal region; frictions of oil, and spirits of ammonia, &c., to be continued to fauces; wound suppurates freely; gargle continued, &c.

November 2, Five, p.m. Is better; pulse 72, regular; quite cheerful; opens jaws very well; less prominence of chest; less rigidity of muscles of back; ptyalism nearly ceased; mouth much better; gums less swelled and less spongy; tongue still covered with same white thick fur, cleansing on edges and tip; bowels very costive, and great difficulty in passing his urine—amounts to almost total retention; valerian was not given; occasionally he has slight shooting pain from sternum to spine, when belly becomes very hard, limbs flexed and rigid; belly otherwise less hard; quite cheerful; sleeps well; appetite improved; and slight thirst. Ordered purgative injections to be repeated until he evacuates freely; root of valerian to be added to tisan; introduced catheter, found considerable resistance at neck of bladder, but by holding it there some time, and pressing it steadily, but very gently, forward, and at the same time diverting patient's attention, I finally overcame the spasm; drew off but a small quantity. Ordered for next morning compound senna tea; a little more nutritious aliment allowed; tisan and other medicines continued as before, except morphia, which is to be suspended.

5. Much better; no pain whatever; purge had operated very freely; his bowels still continue loose; ptyalism has increased; tongue clear, except at back part, where there is still a thick fur; gums very red, tender but hard; pulse 72, natural; belly soft; appetite very good; sleeps well; walked about the room to-day; no longer any difficulty in passing the urine; jaws open freely. Ordered gargle of tincture of myrrh, tincture of guaicum, and infusion of cinchona.

8. Much better; convalescent. Ordered all medicine except gargle to be stopt.

12. Met him riding out; is quite well; wound closed.—*Medical Examiner.*

REMEDY FOR CHRONIC DISEASE OF THE SKIN.

An excellent curative for chronic disease of the skin, which is used as a specific in many parts of Macedonia, is an infusion made with root of *attick* (*sambucus ebulus*) and the stalks of *smilax sarsaparilla*. The infusion is said to possess purgative powers.—*Annals of Chymistry*, No. 8.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, DECEMBER 31, 1842.

The political press has been recently, and in a very sudden manner, inspired by a strange kind of zeal to uphold the privileges of the London College of Surgeons. For some months past various mysterious paragraphs have been going the round of the public papers, intimating to all whom it may concern, "that the poor-law commissioners have recently dismissed all those who held Scotch or Irish diplomas from their offices under them as unqualified."

Nobody knew whence this kindly intimation came, although it was evident enough whither it was directed. The effect, however, has been to bring a golden harvest to the council of the college, who, about the same period, generously threw open their portals to all comers, and have now appointed a special day (Monday) for the reception of elderly gentlemen whose bowels yearn for the garbage of the poor-law commissioners.

Whether the announcement came from the college, who are largely profiting by it, or from the commissioners, who affect to submit to the strict letter of the law, it has had the inconvenience of causing much dismay and anxiety amongst the profession. The fact, however, is not strictly such as it has been stated to be by the political press, and as some misconception respecting it seems to exist, we shall endeavour to explain briefly the actual bearing of the case. Our attention has been again directed to it by a letter from Mr. Wolseley, published on the 17th of December, in the "Caledonian Mercury." Mr. Wolseley, assuming the newspaper report to be correct, complains bitterly that the regulations of the poor-law commissioners are calculated "distinctly to impress the public with the idea that the qualifications of Scotch medical men are unsatisfactory, and therefore that they are not entitled to administer remedial agents to the sick out of Scotland or Ireland."

We cannot be suspected of having any affection for the poor-law commissioners, and may, without scruple, affirm that in this matter, at least, they are not so much to blame as the legislature. In the first place it is not true that the commissioners have dismissed the Scotch and Irish graduates who held office under them in last May, when their medical regulations were issued. They merely laid down certain rules respecting the qualification of medical officers who might be elected *subsequently* to the period alluded to, giving the boards of guardians power to retain the gentlemen who were in office on the 12th of May, 1842. There has been no dismissal, but simply restriction of qualification. These restrictions are justified on the score of their being required

by law, and we must confess that in adopting them the commissioners have done nothing more than conform to the strict letter of the law.

The qualifications for union medical officers admitted by the poor-law commissioners are of four kinds. We shall recite them here, as several of our friends in the country seem to have forgotten that we published them many months since.

1. A diploma from the Royal College of Surgeons, together with a degree in medicine from an English university, or the London College of Physicians.

2. A diploma from the London College of Surgeons, with a certificate from the London Apothecaries' Hall.

3. A diploma from the London College of Surgeons, and a right to practise as an apothecary acquired by the person having been in practice as an apothecary before August 1, 1816.

4. A commission as surgeon, or assistant-surgeon, in her Majesty's navy, or as surgeon, assistant-surgeon, or apothecary, in the army; or as surgeon or assistant-surgeon in the East India Company's Service, dated previous to August 1, 1826.

To those who are not familiar with the numerous questions agitated during the discussion of poor-law medical relief, or the actual state of the laws which affect the medical profession generally, the above cited regulations of the poor-law commissioners may appear complex and unsatisfactory; but a few remarks will serve to explain the motives which led to their adoption. In the first place, the necessity of a double qualification for union officers—of a license to practise both surgery and medicine—had long been urged on the commissioners; and to this they at length acceded; the medical officer of a union was, therefore, required to have a diploma from the College of Surgeons, and a license from an English University, from the College of Physicians, or from Apothecaries' Hall.

In the second place, the 109th section of the Poor-law Act requires that the medical officer should be "a person duly licensed to practise as a medical man." The question then at once occurs, who is duly licensed to practise as a medical man within the precincts of England and Wales? Upon this point great ignorance prevails amongst the members of the profession; for the exclusive privileges of the corporate bodies extend further than even they themselves seem to be aware.

The College of Surgeons in London have the exclusive right of licensing persons to practise surgery throughout England and Wales. The right to practise medicine may be conferred by the College of Physicians, the Universities of Oxford and Cambridge, and the Apothecaries' Hall. In addition to the privilege of conferring licenses to practise medicine, these corporations enjoy the power of prohibiting all who are

not of their body, from practising medicine within their territorial jurisdictions.

The statutes of 3 Hen. VIII., c. 11, and 14 Hen. VIII., c. 5, exclude every person from practising physic anywhere in England or Wales, unless he be a graduate of Oxford or Cambridge, or admitted to practise by the London College of Physicians.

The charter of Car. I., confirmed by the 18th Geo. II., c. 15, prohibits every person from practising surgery in England and Wales, unless he be admitted by the College of Surgeons, London, or be a physician. While the Act of 1815 prohibits every one from acting as an apothecary in England and Wales, who has not a certificate from the Apothecaries' Company, with the exception of those in practice as apothecaries previous to 1815, and the army and navy surgeons of 1826, who are privileged by a particular act which expired on the 1st of August, 1826.

From what has been said, it is clear that the poor-law commissioners are required, according to strict law, to reject Irish and Scotch graduates. The fault lies in the confused and unsatisfactory state of the law, and not in the commission. But it is another question, how far the commissioners were called upon to stick to the extreme letter of the law—to rake up old and long neglected charters against a body of men, who, by sufferance as well as by public opinion, had been permitted to exercise their calling in these kingdoms. Was the interference of the commissioners required as a matter of expediency or public necessity? Certainly not. Was it demanded by any of the corporate bodies? We cannot undertake to answer, perhaps Mr. Guthrie could; at all events, the acts of the commissioners show that they are not always influenced by a blind obedience to law, or to justice. They can violate both when it may so please them. They defend their regulations on the plea that "they are bound by the law as they find it, and have no power to relax the existing statutory prohibitions; yet they direct boards of guardians to elect unqualified men (*i. e.* to violate the 109th section of their own law) whenever it may not be *practicable* to find a qualified one. The laws of the realm may be deliberately violated to suit the views of commissioners and guardians, but the charters of the London corporations must be upheld to the detriment and consideration of the profession in Scotland and Ireland.

If the conduct of the commissioners had been consistent, their legal plea might have been admitted; but when they throw the law overboard to suit their own views, they cannot justify a stringent application of it to promote the interests of selfish corporations. The Irish and Scotch graduates must therefore submit, for the time being, to the disqualifications imposed on them by law, and applied to them by the commissioners. Out of evil, however, cometh good. The manifest injustice of excluding a body of highly edu-

cated men from the exercise of their profession in England must work a speedy and complete reform in the existing state of things. The poor-law commissioners have, unwittingly, inflicted a fatal blow on the monopoly of their corporate bottle-holders.

Our attention has been directed by a friend to a low attack on Messrs. Carmichael, O'Beirne, and M'Donnell, in the advertising columns of the "Evening Packet." The cause of the poor-law commissioners in Ireland must be reduced to a very low ebb indeed, when they are compelled to hire anonymous slanderers for the purpose of vilifying, under the form of advertisement, such men as Mr. Carmichael and his colleagues. In savage warfare any mode of attack may be permitted, and each noxious animal may have its peculiar poison; but we did not, at this side the water, think that vipers were still to be found in the land of saints, or that any one, in the nineteenth century, would condescend to avail himself of such an ally as "The Old Dispensary Officer." We know not who he is, and we have not the slightest wish to make his acquaintance, even upon paper. He must, however, belong to that class of men whose calumny is praise. To defend the president of the Irish Association from the insinuations of such a person, were a work of supererogation. The high character of Mr. Carmichael is too well known to require justification amongst the profession in this country, by whom he is universally admired and esteemed.

REVIEWS.

Principles of Human Physiology. By WILLIAM B. CARPENTER, M.D. London: Churchill, 1842. pp. 680.

Few branches of science have been of late years the object of more attention or experimental research than physiology, and, amongst the many remarkable volumes published on this subject, none, perhaps, contains in a more complete and condensed form the various results of modern investigation than the book which is now before us. Dr. Carpenter has, in our opinion, fully redeemed the pledge held out in his first publications, and accomplished the end which many others have failed to attain—viz., that of placing before the student a concise, but comprehensive view of the many results of modern inquiry, with an intelligent appreciation of their intrinsic value.

The arrangement followed by the author is well suited to his subject. The study of each function is prefaced by a rapid, but sufficiently complete, examination of the comparative anatomy of the organs under consideration, and all the knowledge to be derived from the three chief sources of physiological information—anatomy, experiments, and pathology—is laid in succession before the reader.

After a philosophical classification of the functions, the author enters at once upon the study of the nervous system.

Dr. M. Hall's theory is adopted almost without restriction, and the influence of the spinal chord over respiration, deglutition, and other reflex actions, carefully examined. The cephalic nerves are in turn the object of Dr. Carpenter's attention, and the peculiar action of each is explained. Here will be found Valentin's theory of the consensual movements of the muscles of the orbit, Dr. Reid's valuable researches on the eighth pair, and Sir Charles Bell's notions on the respiratory nerves.

The cerebellum and its functions are next inquired into. Three opinions may be said to divide physiologists on this point. Foville and Duges consider it as the organ of sensibility. In the theory adopted by Rolando, Flourens, Magendie, and Bouillaud, the cerebellum presides over mobility, while Gall, Spurzheim, and the phrenologists, make it the seat of sexual instinct. Perhaps the first opinion is deserving of more attention than Dr. Carpenter has bestowed upon it, inasmuch as anatomy shows us that the posterior sensitive columns of the chord are lost in the substance of the cerebellum, and, as cases mentioned by Andral, of lesion of this organ, were accompanied by considerable alteration of general sensibility. M. Duges also mentions the opinion, promulgated first by Treviranus, that the cerebellum follows, in the development of its hemispheres, the gradually increasing perfection of the organ of hearing, and ascribes to it, in consequence, considerable influence over that special sense. Dr. Carpenter insists upon the marked connection between mobility and the size of the cerebellum, and adduces the statistical observations of Leuret and Lassaigue to disprove the opinion of phrenologists, the average proportion of the cerebellum having been found to be positively greater in twenty-one geldings than in ten stallions and twelve mares, in which its weight was likewise ascertained. Dr. Carpenter is, however, inclined to believe that the vermiform processes are the parts concerned in sexual instincts, whilst the lobes are the regulators of mobility.

Comparative anatomy, experiments, and pathology, are next brought to bear upon the functions of the cerebrum. Dr. C. thinks the views of phrenologists should neither be adopted in all their details, nor altogether discarded as a whole. We are ourselves disposed to consider their classification of mental operations as unobjectionable, whereas localisation of the functions, craniology in a word, remains widely open to doubt and controversy.

The fourth chapter is dedicated to "*sensation*." It is here demonstrated that the vascularity of a part is an essential condition of its sensibility, and the author insists, with much reason, upon the important fact, that "the change of which the mind is informed, is not the change at the peripheral extremities of the nerves, but the change communicated to the sensorium."

The first part of this chapter closes with some remarks on the influence of attention over the acuteness of particular sensations, and the singular fact that—

"The constant direction of attention to internal sensations of a subjective kind, does sometimes occasion actual disorder of the parts to which these sensations are referred."

Professor Weber's experiments and conclusions are adopted in regard to the sense of touch. The sense of taste is ascribed to the lingual branch of the fifth pair and to the glosso-pharyngeal. The author passes rapidly over the sense of smell, and examines vision at some length.

His views of the adaptation of the eye to distances are so far from exclusive, that he believes this property of the organ to be attributable to the changes of forms of the globe, and modifications both of shape and position of the lens. He appears to consider the modifications of this body to be rather results of alterations of forms of the eyeball, than as the consequence of an inherent contractility admitted by Duges in the lens itself. Now, although Young and Hunter vainly attempted to induce contraction in the lens by the stimulus of electricity, although that contractility is not of a nature to be readily distinguished with the naked eye, yet, the fact of its well demonstrated vitality, the shape and number of the fibrillæ which form its structure, so minutely described by Duges, the increased facility of adaptation to distances acquired by constant exercise of the organ, the myopia so remarkable in watchmakers, engravers, and those whose avocations oblige them to a continued inspection of diminutive bodies, all seem to imply the muscular nature of the lens, and to show it to be subject to increase of power as well as to a loss of contractility near akin to paralysis, which would account satisfactorily for all the phenomena of presbyopia.

Erect vision seems more difficult of explanation. The author rejects Sir D. Brewster's law of visible direction, upon grounds which do not appear to us sufficiently strong to warrant its being discarded. Dr. C. prefers Müller's theory, according to which all objects, being equally reverted, they all maintain the same relative position. On the other hand:—

"The notion of erectness which we form by the combined use of our eyes and our hands, is really the product of *experience* in ourselves, whereas, it is probably *innate* in the lower animals."

This theory does not, we must say, completely satisfy the mind. Whatever arguments may be adduced in support of it, one fact remains certain, and that is, we *do not* see objects reversed; now, as it is not the image painted on the retina that we behold—as we do not see the objects such as they are represented in the eye, but in the distinct spot of space which they occupy, we conceive it matters very little whether the image in the eye be erect or reverted, vision being a cerebral operation, produced by an impression on the retina, the precise nature of which appears to us to be of little import. The problem of single vision with two eyes can also be solved with the same data, assisted by the knowledge of the partial decussation of the optic nerves.

In the examination of the sense of hearing, the author takes occasion to bring forward important

views of comparative anatomy, and a detailed account of the results of Müller's experiments on the transmission of sonorous vibrations through fluids.

The fifth chapter treats of muscular contractility. After an interesting microscopic history of muscular structure, both of organic and animal life, the author examines the properties of muscular fibre, and acquiesces completely in the doctrines of Haller, who considers irritability and contractility as vital properties inherent to muscular texture, under the control of the nervous system. The opinion upheld by Prévost and Dumas of the zig-zag flexure of muscle during contraction, is here, and we think with good reason, rejected. The observations of Owen, Thomson, and Bowman, have shown that all the fibrillæ do not enter simultaneously into a state of contraction, and that the flexed appearance noticed by Prévost and Dumas, is due to the approximation of the extremities of the fibrillæ, which do not contract in each fasciculus. We should have wished to see this excellent chapter completed by an analysis of the movements of man—an arduous subject, not without interest or importance to the physiologist.

Haller's classification of the muscles of the larynx is adopted in the chapter which treats of "voice and speech." Physiologists do not, however, adopt in general this classification. We will give one instance: the eminent writer above-mentioned considers the thyro-arytenoideus as relaxing the vocal ligaments, whilst Professor Gerdy believes it to be a tensor, and Professor Cruveilhier makes it not only a tensor, but also a powerful constrictor glottidis. Müller's theory of voice, a modification of that first proposed by Biot and Magendie, is adhered to by Dr. Carpenter. A rapid survey of articulate sounds is followed by an interesting disquisition on the influence of the nervous system on the organic functions, after which the author immediately proceeds to digestion and absorption.

The various phenomena of gastric digestion are beautifully illustrated from circumstances noticed by Dr. Beaumont, in the well-known case of Al. St. Martin; and the cause of hunger, according to Dr. Beaumont's theory, is explained in a most satisfactory manner. Is it not far more rational to admit that "there is a certain condition of the capillary circulation of the stomach, which is preparatory to secretion, and which is excited by the sympathetic nerves that communicate, as it were, the wants of the general system? This condition, acting on the par vagum, may easily be imagined to be the proximate cause of the sensation of hunger."

Is it not, we ask, far more satisfactory to admit this explanation, than to suppose with Professor Bérard, for instance, that hunger is the result of a peculiar contraction of the stomach induced by vacuity, and analogous to "cramp."

The sensation of thirst, the movement of the food in the stomach, the action of the intestinal tube, the researches of Eberle, Schwann, and Wasmann on *pepsin* are carefully noted and explained. New observations of Liebig show the near relationship existing between

albumen and fibrin, which are only combinations of protein, a new compound recently isolated, with different proportions of phosphorus and sulphur. Recent researches of Professor Dumas, communicated to the Academy of Sciences of Paris, on the 28th of November, 1842, prove that this is not the only difference between albumen and fibrin, the former containing less nitrogen and more carbon than the latter. Illustrations from Krause, Wagner, Dollinger, elucidate the intricate questions of lacteal and lymphatic absorption, and are followed by highly philosophical remarks on the modifications undergone by the various proximate principles in the human body.

As a specimen of the supply of food required for the preservation of health in men engaged in active exercise, Dr. Carpenter takes the diet scale of the British navy, consisting of from 31 to 35 ounces of dry nutritious matter daily. The diet scale of the French cavalry is pretty nearly the same, being composed of—

	Grams.	Grains.	
Meat . . .	286	corresp. to	70 of azotised matter.
Bread . .	1066	"	61 "
Vegetables	125	"	20 "

1476 154 out of which about 22 grams. of nitrogen may be extracted. Now, as the average quantity of urea separated by the kidneys is 32 grams. or one ounce, containing 16 grams. or one half of its weight of nitrogen, it follows as a necessary inference that, taking into account the mere balance of nitrogen introduced into and excreted from the system, the quantity of nutriment necessary for the support of health must contain at the very least 120 grams. (4 ounces) of azotised matter, or 16 grams. (half an ounce) of nitrogen. These considerations laid before the Academy of Sciences of Paris, in an elaborate memoir by Dr. Dumas, explain to the full the loss of health in the Millbank Penitentiary, when the scale of diet fell from 31 to 21 ounces of dry nutriment per diem.

The ninth chapter treats of circulation, the movements and sounds of the heart, their causes, the experiments of Hales and Poiseulle on the force of propulsion of the blood; the pulse, the causes of circulation in the arteries, the capillaries and the veins are successively and ably exposed.

After a rapid survey of the respiratory apparatus in various classes of animals, Dr. Carpenter examines the chemical effects of respiration on the air and on the blood. The experiments of Dr. Edwards, of Mr. Coathupe, of Allen and Pepys, are the principal sources from which Dr. C. derives the notions he places before the reader. Three theories have been brought forward to explain the chemical changes in the blood. Lavoisier believed the carbon and hydrogen of the venous blood united with the oxygen of the air to form water and carbonic acid. But the fact that carbonic acid is evolved from venous blood, over which hydrogen is allowed to pass, proves the fallacy of this theory, which was so long received with favor. La-grange supposed the oxygen of the air dissolved in the arterial blood became combined with carbon in the capillaries, and returned under the shape of carbonic

acid in the venous blood to be set free in the lungs. The last theory is that to which Dr. Carpenter adheres, and originated with Mitscherlich. This author conceives lactates to exist in the blood in larger quantity than can be accounted for by the composition of the food; he believes, therefore, that the lactates are formed in the lungs by the absorption of oxygen, formation of lactic acid in the blood, and displacement of carbonic acid which is disengaged.

Under the head of "nutrition" follows a long and important chapter. The cellular formation, the elaboration of chyle and lymph, the physical and vital properties of the blood, its pathological changes—all receive a new life from the observations of Gulliver, Müller, Scherer, Andral, and Gavarret.

The opinions of Toynbee on cartilages, of Bidder on hair, nails, &c., Gulliver on callus, and an interesting extract from Mr. Goodsir's publications on the structure and development of teeth, Frémy's chemical researches on the brain, are all brought to bear upon this intricate subject.

Before enlarging upon the secretion of bile, Dr. Carpenter gives an account of Mr. Kiernan's ideas on hepatic structure. Kiernan's injections have been repeated by Dr. Lambron, who rejects the biliary plexus, which Dr. K. himself* acknowledges "he has never seen." One single biliary duct penetrates into each granulation. Dr. Lambron insists, also, upon the extreme facility with which injections are made to pass from the biliary into the lymphatic vessels, a disposition rendering easily intelligible the mechanism of Icterus. The anatomical structure of the liver is followed by a sufficiently explicit account of the nature, composition, and use of bile.

After an able history of urinary secretion, the author turns to the mammary glands; he examines the composition of milk, its microscopic aspect, and the influence of the mental state upon the secretion.

We cannot refrain from adding a short extract from M. Donné's communications to the academy on this point. His researches demonstrate that women inhabiting a large city, like Paris, are seldom good nurses after thirty, whereas, nurses from the country are at that age in their prime. The mortality of children at nurse is the smallest possible in those parts where cattle, especially cows, are numerous; and the influence of the fair or dark complexions was equally favorable in 400 nurses examined to that effect, whereas, out of nine foxy women, five only yielded a healthy supply of milk.

With reference to animal heat Dr. Carpenter brings forward the experiments of Dulong and Despretz, Breschet and Becquerel, to discover if possible its sources. The problem is shown to be insoluble in the present state of science. Dulong and Despretz, for instance, take it for granted that the watery vapor exhaled during respiration is a result of chemical combination, whereas it is just as likely to be a secretion from the blood. Dr. Edward's experiments on the different degree of calorifying power at different

periods of life, and the influence of evaporation on resistance to heat, close the chapter.

Some valuable pages on reproduction terminate this work, the perusal of which cannot fail to be productive of much information. As a scientific work it places the reader in possession of the knowledge acquired to science by the most modern as well as most ancient physiologists. As a work of art, we cannot too much commend its composition, enhanced as it is by many beautiful plates and illustrations.

ACADEMY OF SCIENCES, PARIS.

December 19, 1842.

PRIZES.

A prize of £60 was given to M. Larget, and one of similar value to M. Matteucci for their researches in experimental physiology. A reward of £120 was given to M. de la Rive, of Geneva, for having been the first to apply electricity to the gilding of metals. A prize of £240 was given to M. Elkington for his discovery relative to gilding; and a prize of the same value to M. Ruolz for his discoveries in the same line. A recompense of £200 was awarded to M. Bouillaud for his two works "On the Diseases of the Heart" and "On Rheumatism;" one of £80 to M. Grisolle for his work on "Pneumonia;" an encouragement of £40 to M. A. Becquerel for his work on the "Urine;" a recompense of £120 to M. Amussat for his operation for lumbar anus; one of £60 to M. Segalas for his new mode of treating urinary fistula; and one of £40 to M. Ricord for his improvement of M. Segalas' method. Finally, an honorable notice was accorded to the memoir of M. Hatin, and to the work of M. Mercier on "Diseases of the Genito-urinary Organs."

ACADEMY OF MEDICINE, PARIS.

December 20, 1842.

STRICTURE OF THE ŒSOPHAGUS.

M. Bérard exhibited a preparation taken from the body of a patient who had died in his wards at the hospital of la Pitié. It showed stricture of the œsophagus, which had rendered deglutition extremely difficult, giving rise to all the well known symptoms of the disease. The bougie was invariably stopped below the level of the larynx, and the fluid injected was returned by the mouth. On passing the instrument, it seemed to strike against a rough substance, which the author suspected to be the cricoid cartilage. The patient died of pneumonia at a time when the propriety of opening the œsophagus was under consideration. The stricture of the œsophagus was very complete, and was formed by scirrhus hardening, and above it was found a plum-stone, which had not been removed from its bed by any of the attempts to pass the bougie. The author asks what should be the practice in cases of this kind? Supposing that the presence of a foreign body had been established, it would have been right to make some attempt at removing it; but if this were impossible, the only hope left was œsophagotomy. The author was inclined to think that the plum-stone had not been the exciting cause of the disease.

* Explan. of plate 22, fig. 3, p. 769.

M. Amussat was of a contrary opinion, and mentioned that if a metallic sound had been employed, the presence of the foreign body would have been easily discovered.

ERECTILE TUMORS.

M. Pigeault showed a child whom he had cured of erectile tumors on the forehead and back by vaccinating them. This practice had been previously employed, with success in similar cases, by M. Bousquet.

STRABISMUS.

M. Lucien Boyer showed an anatomical preparation demonstrating the mode of healing of the internal rectus muscle after the operation for squinting. The muscle had been divided twenty-three months before death.

The patient, a girl, twelve years of age, laboring under convergent strabismus of the right eye, had been operated on by M. Boyer on the 21st of January, 1841; the result was a quick and complete cure. The movements of the eye were soon restored, and that of adduction was perfect. The child died of a tubercular affection in December, 1842. It is worthy of remark that vision had been completely abolished in the affected eye previous to the operation, so much so that a celebrated oculist had pronounced the eye amaurotic; but immediately after division of the rectus the child could distinguish a key, a five-franc piece, and the power of vision gradually increased.

On examining the eye which was operated on, it may be seen that the rectus has contracted a new tendinous adhesion with the globe of the eye; the tendinous band is adherent at 3.99 lines (9 millimetres) behind the cornea, while the tendon of the sound eye is fixed at 3.10 lines (7 millimetres); in the latter the muscular fibre is gradually lost in the tendon; in the former there is a distinct line of demarcation between them; it is therefore clear that the tendon is one of new formation. A preparation made in London by Mr. Babington and others, in Paris by MM. Bouvier and Lenoir, furnish the same results, and show the true nature of the process by which a permanent cure is obtained. The various members present examined the preparations of M. Boyer with much interest, and convinced themselves of the fact announced by him.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The PRESIDENT in the Chair.

December 13, 1842.

A Report of some Cases of Lithotomy, with Observations on Cheselden's last and most successful Method of Operating. By CHARLES MAYO, Senior Surgeon to the County Hospital at Winchester. [In a letter to E. Stanley, Esq., F.R.S.]

The object of the author in this communication is to recommend for general adoption a method of operating, which he believes to be that most approved by Cheselden, but upon which question there appears to have been much difference of opinion, even among the writers contemporary with Cheselden, or nearly succeeding to his time. The operation is performed with a common scalpel, making first a large and deep incision, and then, having cut into the side of the prostate gland, the knife is brought out along the groove of the

staff into the membranous portion of the urethra. In a case in which the operation was done upon the dead subject, the author thus describes the incision, as ascertained by a careful dissection. "The tract and extent of the incision in the prostate appeared to be from an inch to an inch and a half in length, and in an oblique direction, leaving the seminal ducts and caput galinaginis to the right, and ending in the membranous part of the urethra." Of sixteen patients operated upon in this manner in the Winchester Hospital, and in private practice, two died; and in one of these there was found much disease of the kidneys, while the other presented extensive disorganisation of the lungs.

The author objects to the advice given by Dr. Willis, who says that "the perfection of the operation consists in making as small a nick as possible into the anterior edge of the prostate, and tearing the rest; and remarks that there are several objections and inconsistencies which might be observed upon in the practice of the most successful lithotomists; giving, as an instance, the practice of Mr. Martineau, who lost only two cases out of eighty-four, cut in seventeen years, and who, nevertheless, was in the habit (as the author alleged) of making a lateral enlargement of the wound in withdrawing the knife, whereby the internal pudendal artery must often have been in jeopardy, and of putting lint and a pledget of tow over the wound to exclude the air. He concludes by remarking that the main points on which he particularly insists are, "a free incision of the neck of the bladder, so that the stone may be extracted without laceration, and a large external wound, properly kept open, in order to avoid all risk of urinary infiltration."

SHEFFIELD MEDICAL SOCIETY.

Dec. 15, 1842.

The PRESIDENT in the Chair.

DISEASE OF THE HEART.

Dr. Favell exhibited a specimen of diseased heart, taken from a man, aged thirty-one, who had suffered from palpitation, dyspnoea, &c., for several years. About a fortnight ago he was admitted into the infirmary. At that time he labored under great oppression at the chest; the face was livid; the action of the heart very violent; the pulse extremely small; the extremities exceedingly anasarcaous, and the pulsation in the jugulars remarkably distinct. The dulness on percussing the præcordial region was much more extensive than usual; the ventricular contraction yielded a dull, heavy, and prolonged sound, which was accompanied by a rough murmur beneath the left nipple; the abnormal sound was louder in the situation of the ensiform cartilage; about the middle of the sternum there was a distinct soufflé with the second sound of the heart. The patient had, many years previously, suffered from rheumatic fever. On a post-mortem examination, the pericardium was found closely adherent to the heart from base to apex; the external surface was also adherent to the left pleura; the heart was much larger than natural, and weighed a pound and a quarter; the right auricle was very much dilated; the right auriculo-ventricular opening much enlarged; the tricuspid valve of nor-

mal thickness, but shortened by a considerable ossific deposit near its insertion. This permitted free regurgitation into the right auricle; pulmonary valves healthy; left ventricle greatly thickened; the left auriculo-ventricular opening contracted so as only to admit the little finger; mitral valve thickened and indurated; aortic valves much thickened, and containing ossific deposit.

DIABETES.

Sir Arnold J. Knight, M.D., related the particulars of a case of diabetes which he has had under his care for about two months. The patient is a timber merchant, aged forty-eight, of spare habit and nervous temperament; mouth dry, hot, and clammy; appetite moderate, but thirst very urgent; stomach not particularly uneasy; skin nearly natural; thinks he perspires a little on taking active exercise; had a violent pain across the loins about a month ago, but it went off in three or four days; no phymosis nor inflammation about the end of the urethra; sexual propensity as usual till the last week or two, when it became less; pulse 90, small; no cough nor pain in the chest; is much thinner; his habits have been temperate, and he has lately been much confined by business; passed seven pints and a half of urine in twenty-four hours, specific gravity 1039. When submitted to evaporation, it yielded a residue like thick treacle, which smelt like burnt sugar; half a pint of urine afforded seven drachms of dry extract. He was ordered to take five grains of soap and opium pill every night, to live exclusively on animal food, and to take sparingly water, acidulated with nitrous acid, for common drink. After three days the symptoms continued as before. He was then desired to restrict his diet rigidly to plain roast or boiled beef, mutton, fowl, or game; he was also allowed to take eggs and the green cruciferous vegetables, and to have weak brandy and water for common drink, and to take the following mixture:—

Sesquicarbonate of ammonia, two scruples;

Infusion of Calumba, nine ounces. An ounce and a half every six hours. Continue the opium pill.

This was on the 27th of October.

On the 31st of the same month the patient expressed himself as much relieved, said he felt himself like a new man; during the last twenty-four hours passed only three pints and a half of urine, specific gravity 1035½, and yielded six drachms of solid extract.

Nov. 3. Passed only two pints and a half of urine in the last twenty-four hours; appetite and thirst natural. Continue remedies.

24. The urine has continued to average about three pints, and a half pint now yields four drachms and ten grains of solid extract. Soreness at the end of the penis, and has little or no sexual desire. Weight of body nearly natural. Continue remedies. To have milk twice a-day.

December 1. Took the milk for two days and passed four pints of urine. Omitted it, and then only three pints. Specific gravity 1037. Solid contents four drachms and one scruple.

The last report was for December 13. Weight of body increased during the week two and a quarter pounds; soreness at the end of the penis gone; knees still weak, but stronger; tongue dry; pulse 78; no thirst; appetite good; sexual power natural; specific

gravity of urine 1035. Extract from half a pint, four drachms ten grains.

USE OF NITRATE OF SILVER IN SURGERY.

Mr. Henry Jackson then read a few cases illustrative of some of the uses of nitrate of silver as a surgical remedy.

He first introduced the subject of bed-sores—so frequently occurring in practice, so distressing to the patient, and so unsatisfactory to the medical man.

He stated that, not finding any published account of their mode of treatment—not even in the latest published lectures (the clinical lectures of Dr. Watson, published in this Journal), neither in Mr. Higginbottom's work, save a mere general remark, but without any direct reference to the subject of these sores, he was induced to bring it before the society.

One case occurred from long confinement to bed, in which all the known remedies had been tried without avail—the lotio de Haën (white of egg, and spirit of wine, or brandy,) plasters of different kinds, removal of pressure by means of pillows—all of which only answered for a time. In the course of conversation with Dr. Thompson, the nitrate of silver was suggested, and was found to answer perfectly.

Another case occurred in a stout woman, who was seized with paralysis. This was made more formidable by the constant dribbling of urine, and when attention was called to it, a very large slough was found to exist over the sacrum, with very extensive inflammation surrounding. The nitrate of silver was applied, and the inflammation was almost immediately subdued, and the ulcer very speedily healed. The excoriation of the thighs, from the dribbling of urine, was also remedied. This occurred six years ago, and the patient, who is still living, has never experienced any of the annoyance resulting from either this or the almost constant pressure, by making occasional use of the remedy.

He mentioned several other cases, one of phthisis, in which the same beneficial results had been experienced.

The form which he uses is in the proportion of ten grains of the nitrate of silver to one ounce of water, applied by means of a camel-hair brush over every part exhibiting the slightest appearance of inflammation, two or three times a-day, until the skin has become blackened; afterwards only occasionally.

He then mentioned its great utility in the treatment of burns and scalds, in which he had found great benefit resulting from its application, and instanced several cases of superficial burns in children in which he had found that in a very short time after its application the pain ceased, and vesication was totally prevented.

In the deeper burns he uses it, not that he finds that it can produce any effect upon the charred parts, but that as Mr. Higginbottom has said, he finds the superficial burn healed, and the extent consequently circumscribed.

RETROSPECT OF THE MEDICAL SCIENCES.

EFFECTS OF DIVING.

The diving season at Spithead, for the removal of the wreck of the Royal George, commences in May and ends in October, the divers being usually employed eight or ten hours in the twenty-four. They remain under water, according to the nature of their work, from half an hour to three hours; and, although in order to accelerate their descent, they are heavily laden with ponderous shoes and large leaden weights on their shoulders, constituting a dress of a hundred and thirty pounds' weight, they move about nimbly at the bottom of the sea, and feel and work as lightly as if they had nothing on their shoulders and feet. They are employed four hours at a time during the slack tide of low water, and in that space they usually descend about four times. On their ascent, after an hour's submersion, they appeared, while they were leaning against the hulk's side, to be pale, languid, and exhausted, though they did not admit they were fatigued. When they reach the top of the ladder the centre lens is unscrewed, their ponderous helmet is taken off, and they are generally allowed ten minutes to recruit. They can only work two hours at the slack tide of high water, in consequence of the strength with which the tide ebbs and flows at that period, which, they say, begins earlier, and runs with much more rapidity at the bottom than at the surface of the sea, and which would carry them off their legs.

The divers engaged are steady men, selected, from their officers' report, from the corps of Royal Sappers and Miners, but only some of those thus selected have become good divers, for the effects of protracted submersion are so different in different individuals, that it is not every man who can follow the perilous life of a diver. Many experience intense pain in the ears, and bleeding at the nose during their descent. Those who are accustomed to dive successfully never suffer any such inconvenience, the only marked uneasy sensation they experience being an occasional sense of nausea, or distension at the stomach, headache, and rheumatism; but they all agree that they are much weakened and wasted by the exertion, and, as they express it, are not the men they were when they began the occupation. There has not yet elapsed sufficient time to ascertain whether it renders them permanently unhealthy or short-lived.

The divers are clothed in flannel dresses that fit closely, which retain the warmth of the body, and prevent the chill that might be produced by the soaking of the water through the seams of the India-rubber dress. This dress is protected on the outside by a canvas covering, from any injury it might sustain by rubbing against the nails or ragged pieces of the wreck.

Upon two occasions accidents have occurred to the divers by the bursting of the tubes by which they are supplied with air. The last instance occurred on the morning of the 11th of July in the present year, to a man of the name of Williams, twenty-six years of age, while engaged at the bottom of the sea, eighty feet from the surface. He was promptly hauled up, but his armour got entangled in the heavy rope-ladder by which the divers descend, and he and it were

pulled up together in the space of a minute and a half from the occurrence of the accident.

On removing the helmet from his head, blood was seen running in a stream from his ears, nose, and mouth. His face and neck were swollen and discolored; he looked faint, but was sensible. When conveyed to the hospital, his face was one mass of lividity; his neck was excessively swollen, bloated, and suffused with livid-colored blood. Dark patches of ecchymosis that did not coalesce existed over the clavicles and shoulders, with intervening spaces of skin of the natural color. The discoloration terminated abruptly at the hairy scalp, nor were any spots seen below the part of the chest covered by the helmet. The lining membrane of the cheeks, under the tongue, over the fauces and pharynx, as far as the eye could reach, but especially over the tonsils, was black with ecchymosis. The conjunctivæ, where they are uncovered by the eyelids, and particularly round the margin of the cornea, were turgid with black blood. He vomited blood before he reached the hospital; the hæmorrhage had then ceased from the nose and ears. He was perfectly sensible, but drowsy; pulse 76, of natural strength; breathing interrupted by frequent, deep, involuntary sighing. The treatment adopted consisted of the application of warmth to the extremities, venesection to twenty ounces in the course of the first day, and the occasional use of purgatives. Three weeks elapsed before he recovered from the consequences of the accident. He afterwards returned to the occupation of a diver.

Mr. Liddell attributes these curious effects to the sudden removal of the compressed air, and the consequent exertion of the pressure of the superincumbent water (equal to the weight of two atmospheres) on those parts of the body which are not covered by the unyielding helmet. Williams says it produced a feeling as if he had been crushed to pieces by his dress. The blood thus driven from the extremities, and from those parts of the body that were not covered by the helmet, was forced into the vessels of the head and neck (as it is into a part of the skin placed under a cupping-glass), and a large portion of it was extravasated into the loose textures into which it had been forcibly driven.—*Med. Chir. Rev.*, Oct., 1842.

MALFORMATIONS OF THE PENIS.

The treatment of the malformations of the penis, consisting of those preternatural openings or fissures on its under and upper surfaces, called hypospadias and epispadias, has recently formed the subject of a communication from Dr. Mettauer, of Prince Edward County, Virginia, which has been published in the "American Journal of Medical Sciences." The openings occur in the median line, and in almost every point between the meatus and neck of the bladder, though they are most frequently met with near the anterior extremity of the penis, and they are liable to every possible variety of form and shape, from the round or oval aperture to the lengthened fissure or slit. In the latter case, they may extend nearly or quite the entire length of the organ, presenting an opening very much as if the urethra had been artificially slit open. The urethra is sometimes

entirely deficient from the preternatural orifice to the extremity of the penis. Sometimes the organ is greatly shortened or lengthened and thickened, with a pouch-like dilatation of a portion of the urethra, and occasionally both epispadias and hypospadias are present to complicate the deformity. The latter is the more frequent form of the imperfection. A permanent flexure of the penis at its cervix is sometimes met with, complicating fissures affecting the glandular portion of the urethra. In both forms of the malformation, the urethra may terminate without an external opening for the escape of urine.

These malformations are almost always congenital, and must, when this is the case, be referred to arrest of development. They are sometimes the result of an abscess in the rapheal line, the aperture remaining fistulous, or of laceration and sloughing of the urethra, or from the operation of puncturing the canal in cases of retention of urine. These examples, however, are rather to be regarded as fistulous openings from accidental causes than instances of hypospadias. Among the annoying consequences resulting from these deformities, is a degree of difficulty and pain in making water, attended with excoriations, and the impediments opposed to sexual intercourse, thereby inducing mental depression, and wasting melancholy, and even in some instances, confirmed mental derangement.

Hypospadias, when the opening is situated only a short distance from the extremity of the glans, and the urethra between those points is either deficient, or, if present, too contracted to allow urine to pass, requires an exceedingly simple and easy treatment. Introducing a small trocar about the size of the natural passage from the opening, along the track usually pursued by the urethra, quite through the extremity of the glans, will effectually open the passage, care being taken that the instrument does not cut through the thin rapheal wall. To prevent such an accident, the cutting edges of the trocar should be directed to the sides of the penis, and along the angle between the corpora cavernosa, the organ being firmly supported in the left hand, and flexed at the opening. As soon as the passage is opened, a gum-elastic tube, large enough to fill the newly-formed passage completely, should be introduced quite through it, and at least eight or ten lines beyond it into the urethra. It should be cut off at its entering extremity, and rounded off so as to enter without wounding the parts; it must also be headed at its outer extremity with sealing-wax. When introduced, it may be securely confined by connecting its head to a kind of hood which firmly embraces the penis, with threads or very narrow tapes. It should be retained in the passage for two or three days, or until free suppuration is established, and afterwards a short bougie passed three or four times, daily, until the passage ceases to discharge. It should then be introduced once a-day for several months until the new canal is firmly established. A catheter may occasionally be used instead of the gum-elastic tube, and is to be preferred if there be reason to believe that the corpora cavernosa or corpus spongiosum are wounded. It answers admirably for restraining hæmorrhage, and preventing accidental infiltrations of urine into the surrounding textures. The fistulous opening may be touched with nitrate of silver, and the slough scraped off with a knife; the surfaces thus

denuded readily unite as a fresh cut, or by granulations, which, amalgamating, effectually close the orifice. Excision of the margin would occasion too great a loss of substance.

When the opening is low down in the penis, or in the perinæum, a larger trocar and bougies will be required. The traumatic bleeding is sometimes very profuse. The hypospadiac orifices in these cases being generally of large size, and situated in a part of the organ abounding in loose textures, their margins may be readily and rapidly denuded by excision, a plan that should always be adopted, unless there be a deficiency of substance. The denuded surfaces must be accurately brought together, and confined in close contact either with adhesive plaster or the uniting bandage, or by the introduction of one or more points of the interrupted suture.

When the malformation is distinguished by an open cleft or fissure, from the termination of the urethra quite to the extremity of the glans, or nearly so, the margins must be carefully denuded with a knife, or by touching them with nitras argenti, and then carefully scraping off the eschars, until they are perfectly denuded. The passage corresponding with the track of the urethra must then be filled with a tube or catheter of a proper size, and the denuded margins brought together so as to embrace it, and at the same time to be in exact and close contact throughout their whole extent. In this condition they are to be retained, and securely fixed with court plaster, applied in successive narrow strips around the organ, the whole extent of the fissure. Thus adjusted, the whole must be confined by a narrow soft bandage, applied without more force than is necessary to maintain the apposition of the denuded margins perfect. The tube, which should extend quite into the bladder, should not be removed until the fourth day, and may be left in until the seventh. When removed, it should be drawn out very gently and gradually, so as not to disturb the lips of the recently united parts. The plasters should not be disturbed during the whole treatment, and such as become loose should be replaced by others. The tube should afterwards be introduced once or twice daily, as long as matter escapes from the meatus, for a moment at a time, to prevent any narrowing of the passages.

The treatment of epispadias must be conducted on principles similar to those which have been laid down for cases of hypospadias. It is, generally speaking, more easy of cure.

Should these malformations be complicated with an unsightly and inconvenient curvature at the cervix or any other portion of the penis, the contracted part must be divided by subcutaneous incisions in succession, made with an exceedingly delicate instrument, until the organ is liberated. The contracted structures are generally situated in the subcutaneous cellular texture, which has lost its soft and yielding qualities, but occasionally the deformity depends on a preternatural shortening of the elastic ligament. The organ must be kept straight until the parts are healed.

STATE OF THE BLOOD IN SCURVY.

A communication on the disorders resulting from defective nutriment, from Dr. Budd, of King's College, published in the "Medical Gazette," contains some interesting information on the state of the blood

in scurvy, derived from recent analyses. Our early writers have stated that the blood in this disease is loose and dissolved, and the most distinguished of modern physiologists have given the same opinion in more precise language, stating that the globules are dissolved in the serum. Such, however, is not the case. The serum is not tinged with the coloring matter of the blood, and the globules examined under the microscope present no perceptible change. Even in advanced stages of scurvy the blood separates into serum and clot as rapidly and as perfectly as healthy blood; and in some cases the clot is very firm and much buffed and cupped—the consequence, perhaps, of a diminished proportion of the globules to the fibrine.

The analyses made by Mr. Busk show that the proportion of hematosine is much diminished, while that of fibrine, of the albumen, and of the salts, is increased. Thus may be readily explained the general paleness of the tissues and the tendency to swoon; but the spongy state of the gums and the great liability to hæmorrhage remain to be accounted for. On this point Dr. Budd thinks that if, as the origin of the disease seems to show, the fault of scurvy-blood is deficiency of some of its constituents, the most probable supposition is, that this deficiency is in the salts; that some saline principle, small, perhaps, in amount, but important in agency, and necessary for the nutrition of some tissues, is wanting. The tissue that seems to suffer most is that of the small blood-vessels, which become weak and easily ruptured, in all probability from defective nutrition. The opinion that the cause of these symptoms is saline deficiency is supported by considering the source from which the principle wanting may be restored—viz, the succulent juices of vegetables and fruits. These juices—the preservatives and specific remedies of scurvy—contain albumen, fibrine, and organic acids in combination with inorganic bases. Their virtues cannot depend on their albumen or fibrine, because these are in excess rather than in default in scurvy-blood. They must depend on some of the incidental principles with which the albumen and fibrine are associated. The radical importance of such principles, both in plants and animals, has been well shown of late by Prout, Liebig, and other chemists, and might have been inferred from the constancy of their presence, and from the fixed proportion which certain of them bear to the other constituents of particular tissues.

The principle, whatever it is, is common to the juices of a great variety of vegetables and unripe fruits, and appears to reside in the juices of the plant only. It seems to be much impaired or destroyed by desiccation, by the action of a strong heat, and the process of vinous fermentation. The antiscorbutic properties of some fruits, as the guavas, seems also to vary with the degree of maturity. The unripe fruit proved on experiment to be the more serviceable. The acetous fermentation appears in no degree to impair the antiscorbutic virtue. Pickles have equal efficacy with the fresh plant; sour kroust made by subjecting sliced cabbages to the acetous fermentation long had great celebrity as a preventive of scurvy. It would appear, indeed that the principle may even be developed by the acetous fermentation, as *sowens*, an acetous preparation of oatmeal, was considered by Sir J. Pringle

and Sir G. Blane as a powerful preventive of scurvy, while it seems well established that oatmeal itself has no such virtue. The pure organic acids are less efficacious than the juices from which they are derived.

From all this it is probable that the principle wanting is a salt which enters the system only in combination with the organic acids.

THE CREPITATING RATTLE OF PNEUMONIA.

Dr. Hughes considers that the true crepitating rattle, indicative of pneumonia, is not known to, nor correctly appreciated by, a very large proportion of those who are in the habit of practising auscultation. The sounds mistaken for it are, a small but unequal crackling or crepitation, accompanying part of the expiration, as well as a great portion of the act of inspiration, which is in fact the muco-crepitation rattle of capillary bronchitis, and a finer and more equal, but a soft and moist crepitation, heard, principally at least, at the end of the inspiratory, and beginning of the expiratory effort—the sub-crepitation rattle of œdema and pulmonary apoplexy. The real crepitating rattle is so peculiar, that it is only necessary once to have heard it distinctly to be able to recognise it ever after; it is, as far as Dr. Hughes' observation extends, perfectly pathognomonic. The sound has, by different writers, been compared to the crepitation of salt in the fire, or upon a piece of red hot iron—to the crumpling of a dry membrane—to the noise produced by the squeezing of gauze-paper—or by the separation of two sticky surfaces; but the most correct representation is that given by Dr. J. C. Williams, who compares it to the delicate crackling sound caused by an individual rubbing hardly between the finger and thumb a lock of his own hair, close to his ear. Dr. Hughes adds another illustration, which, however, he says, is in almost every respect inferior to that last mentioned. He compares it to the sound produced by the simultaneous bursting of the globules of varnish containing a small portion of air, spread out on a plane surface, nearly dry, and burst by the pressure of a soft substance. It appears to the ear like a multitude of exceedingly minute bubbles, all of the same size, by the same effort, and nearly at the same time, bursting in thin but very tenacious fluid; or as if the parietes of the air-cells themselves were stuck together through the medium of the same fluid, and the ingress of the air caused their separation. The rattle is very fine, very dry, very equal; of short duration, and heard only in puffs at the end of the inspiration. When such a rattle is heard, Dr. Hughes believes acute pneumonia may be predicated.

The pure crepitating rattle of advancing pneumonia is first heard at the end of the inspiration; in this particular, as well as the much greater fineness, dryness, and equality of the sound, it differs from the muco-crepitation of capillary bronchitis; it is to be distinguished from the sub-crepitation of œdema and pulmonary apoplexy by its comparative dryness and acuteness, and by its not accompanying the expiration. —*Guy's Hospital Reports*, October, 1842.

MEDICAL REFORM.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—At the present period, when the time rapidly approaches for submitting to Parliament a bill to amend the medical institutions of the country, it is hardly requisite I should apologise to you for offering some observations on medical reform—a subject, which even viewed in reference to personal interest, without regard to the general good, ought to engage the earnest attention of all members of the profession, but more especially of those who have yet before them a considerable portion of their career. To such it is of the deepest importance, that under the pretence of reform, injustice should not be done, or acknowledged evils perpetuated, either covertly and by design, or unintentionally by the careless omission of appropriate and definite clauses.

It is not my intention to occupy space in your columns by advancing a plan, and arguing with a projector's parental fondness in favor of its minute details; still less disposed am I to recommend the assembling of an Esculapian Parliament like that which made so absurd a figure at Exeter-hall, serving only to make manifest the division existing among its members, and to waste day after day in bootless discussion. My object is simply to warn those in the council of the Provincial Association, and particularly Dr. Hastings, who, under the council, has conducted its affairs with great prudence and corresponding success, that there is need of the utmost vigilance and the most persevering exertions to render the bill complete and satisfactory.

The Provincial Association, the largest of our medical societies, and including members from every county and important town in England, with not a few from the metropolis, is a body so important and influential, that no statesman could disregard its representations if earnestly pressed upon his attention; but it is well known to all acquainted with the conduct of public business, that a mere written communication, or report, not seconded by personal interviews, and perhaps repeated remonstrance, has little effect; a communication of this kind is often thrown aside and forgotten, when the minister would allow it due weight if supported by the full and zealous explanations and arguments of oral advocacy.

The vigilance and energy we have made free by recommending are the more necessary, because Sir James Graham, although, as I believe, sincerely desirous of passing a good bill, is much exposed to the influence of those who would perpetuate abuses, many of whom, being in extensive practice and personally acquainted with the members of both Houses, would have numerous opportunities of insinuating their own opinions into the minds of Sir James and his parliamentary supporters, whilst they would be encouraged to do so by the decay of the British Medical Association.

The journals have already made known the leading provisions of Sir James Graham's bill: to some of these, I apprehend, a body so temperate as the Association will readily assent—for instance, to those laying down the constitution of the medical board and a system of registry; but it will be necessary to watch

with the most scrutinizing eye other portions of the bill, and, above all, to weigh carefully every word and clause having reference to the reform of the internal government of the colleges and the privileges of gentlemen holding Scotch or Irish diplomas, lest a bill carrying upon it the name of *improvement* should only rivet monopoly and exclusion.

It would lead me too much into detail to discuss the mode of liberalising no less than eighteen colleges or corporations varying so much in their nature and position, but the rights of Scotch and Irish graduates constitute a subject more definite and more capable of being briefly handled; I shall, therefore, make a few observations regarding them.

There are a great number of Scotch physicians and surgeons resident in England—indeed, nine-tenths of the provincial physicians are graduates of the University of Edinburgh, being for the most part gentlemen of great learning and experience, engaged in extensive practice—is it then unreasonable to expect that their claims should not be set aside and that the bill should contain clauses entitling them to be enrolled not merely in the general registry granting a right to practise, but also in the lists of the Colleges of Physicians of London, Edinburgh, and Dublin, and this, moreover, on the payment of a very moderate fee (if any), and without subjecting those who have been some time in practice to the humiliation of an examination, perhaps conducted by a contemporary or junior, the obscurity of whose literary career at Oxford or Cambridge (it may be) was not interrupted by any occurrence worth talking of, except the very disagreeable operation of *plucking*?

The occasional exclusion of gentlemen holding Scotch diplomas from appointments under the poor-law shows the necessity of caution and wakefulness; for this injustice, inflicted by an act of recent date was accomplished without the advocates of medical reform being at all aware of it. The profession should profit by this oversight, which ought to stand forth as a beacon inscribed with the words, "*Be active—be wary*," and convince them how essential it is to watch the proposed statute *in every stage*—first, in the Home office, in order that the bill of Sir James may be framed in as satisfactory a manner as possible; and secondly, in Parliament, where one or several members of ability should be prepared to oppose that which is objectionable, and to *argue* as well as vote in favor of the reforms demanded by the Association.

I have already shown that the profession will be at the mercy of those adverse to all reform, unless the new measure be watched almost hourly in its progress. It is not my habit to dictate to others or to meddle in that which does not concern me, but although I laugh at the Quixotic outlines of reform proposed by some fiery brethren whose zeal exceeds their discretion, I am so deeply interested in the question, and so sincerely desirous of a full measure of reform, that I do not hesitate to express my opinion as to the way in which the influence of the Association could be most advantageously brought to bear—namely, by entrusting its representation in London solely to Dr. Hastings, its founder, who has conducted it from a comparatively insignificant commencement to a state so prosperous that, ere long, its members will be counted by thousands. Let us have no congresses, or

deliberative committees, or sub-committees—we had enough of these. By assigning to Dr. Hastings the duty of representing it, the Association will confide in a tried officer, who will perform that duty so as to call for the gratitude of the members; whilst this selection will set aside all chance of injury to the good cause by difference of opinion; and this is a point of some importance, for the question of reform was unquestionably damaged by the Exeter-hall congress.

Dr. Hastings' lucrative practice opposes the only obstacle we can see; but, there can be little doubt, that gentleman would, at the request of the council, make some effort (notwithstanding his numerous engagements) to undertake a mission so important to the interests of all members of his profession.

There are many of the leading fellows of the Colleges of Physicians and Surgeons who do not go perhaps quite far enough, but *are* advocates of improvement; amongst these the first place must be assigned to Sir Benjamin Brodie, the sincerity and *bonâ fide* character of whose views regarding medical reform cannot be questioned by any one who calls to mind his resignation of his appointment at St. George's Hospital, an act clearly showing that the guiding principle of his public conduct is the wish to act rightly and generously. Is there any one more likely than Dr. Hastings to win over such men by temperate argument and the weight of his personal character, and thus gain their aid in procuring a satisfactory measure of reform?

It will be objected to me, that no good can be effected by a friendly attitude towards such men, who can be frightened but not persuaded. I am altogether of a different opinion; much, I fancy, may be done by colloquial reasoning, conducted temperately. Indeed, the advantages of accomplishing a degree of improvement in the Colleges of Physicians and Surgeons, sufficiently extensive to remove all grounds of dissatisfaction, by enrolling in the registry of the colleges all who possess diplomas, are so obvious, that one cannot but wonder at the infatuation of those who oppose such a step. To prove how advantageous to the institutions reform would be, the present state of the London College of Physicians should be compared with that it would be raised to by a general enrolment of all the physicians. Should the provincial physicians now in practice be admitted on payment of a registry fee of five pounds, a very large sum would be procured, and, for the future, the college would receive a flourishing income in consequence of its diploma being made, by stringent enactment, essential to the country physician.

Human nature is now the same as in the reign of Domitian, and nothing can be truer than the words of the Roman satirist—

“Nil habet infelix paupertas durius in se,
Quam quod ridiculos homines facit”——

words, the force of which should certainly be felt by the College of Physicians, the poverty of which exposes it to the sneers of its enemies, and ren-

ders it unable to command the respect of the other branch of the profession or of the public. Let the fellows consider the very different position the college would occupy with the number of its members and its funds more than quadrupled. Let those of them (and they are not a few) who can boast of talent and scientific enthusiasm, place before their eyes what they may easily possess, a magnificent library and museum, truly worthy of the most civilised and powerful empire in the world, and compare with those attainable acquisitions the present state of their library and museum and the phthisical state of the college purse—let them, I say, place before their mind's eye these images of plump health contrasted with emaciation, and decide whether it is prudent they should persevere in their present Trappist-like self-denial, their self-inflicted poverty?

It can easily be shown that very extensive reforms may become law without injury to the other colleges, although they would not *profit* by it in the same way and to the same extent as the College of Physicians. But, Gentlemen, I have already occupied so large a portion of your space, it is full time I should conclude, and subscribe myself

Your very obedient servant,

MEDICUS.

Dec. 28, 1842.

EAST SUFFOLK AND IPSWICH HOSPITAL.

Dr. Durrant has been appointed one of the physicians to the East Suffolk and Ipswich Hospital.

PROMOTIONS AND APPOINTMENTS.

War-office, December 27.

33rd Foot—Assistant-surgeon Frank Andrews, from the 1st West India Regiment, to be assistant-surgeon, vice Bowlby, deceased.

90th—William MacIise, gent., to be assistant-surgeon, vice Cowper, appointed to the Staff.

1st West India Regiment—Thomas James Holmes, gent., to be assistant-surgeon, vice Andrews, appointed to the 33rd Foot.

3rd West India Regiment—William Robert Renwick, gent., to be assistant-surgeon, vice Stewart, deceased.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, December 23, 1842.

J. Drury, F. Morgan, W. Peskett, H. Horsfall, D. Sinclair, J. Percival, H. W. King.

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CLINICAL LECTURES

DELIVERED AT THE

METROPOLITAN FREE HOSPITAL.

BY MR. BENNETT LUCAS,

Senior Surgeon to the Institution, and one of the Lecturers on Anatomy and Physiology at the Westminster Hospital School of Medicine.

Lecture III.—Dec. 16, 1842.

GENTLEMEN,—As I anticipated in a former lecture, we have had several new patients, afflicted with diseases of the genito-urinary organs, admitted to the benefits of this institution. I have selected some of these for your special attention, and shall allude to them by and by.

The summary of the cases which I read to you at our last meeting is a very interesting document, as it embraces a faithful record of a very important class of diseases, extending over a period of more than six years, and embodying an experience in 3,695 patients. Of this number, considerably more than one-half were affected with gonorrhœa, and 304 with other diseases of the urethra, glans, and prepuce, exclusive of syphilitic affections of these parts. In the female, the greatest number of gonorrhœal cases occurred between the ages of 15 and 20 years; in the male, the greatest number was between the ages of 21 years and 25. The youngest female with the disease was 11 years old, and the youngest male was 10 years; whilst we have had two female patients aged 60, and two male patients as old as 70 years affected with this disease. The proportion of females to males who had gonorrhœa was nearly as one to nine.

From the results afforded in this institution, we thus see that gonorrhœa may be received by connection at any age between 10 and 70 years in the male, and between 11 and 60 years in the female; facts which may be of some moment in medico-legal investigations, and which also should be borne in mind in the examination of patients applying to us with urethral discharges, where, from their youth or their senility, the existence of gonorrhœa might not be suspected. In the treatment of this disease, also, the age of the patient is a point of some moment in the administration of the remedies appropriate to the disease.

I have placed balanitis after gonorrhœa in consequence of its being a primary affection, and one which, not very long ago, was confounded with gonorrhœa itself. This disease, our report shows, is chiefly to be met with in early life, the largest number of cases having occurred between the ages of 16 and 22 years, no case, with the exception of one individual, aged 57, having presented itself after 39 years of age. This is just what we should expect; for, as the surface of the glans penis and the inner prepuce are the parts affected in balanitis, and as, in early life, these surfaces approach more the characters of mucous mem-

brane than at the more advanced periods, are more sensitive, vascular, and more liable to excess of their natural secretions, they are necessarily more predisposed to abrasions and excoriations, and are more liable to be affected by irritating discharges from the opposite sex, independently of the specific diseases, syphilis and gonorrhœa. Nay, I have seen several instances in young lads, of whose chastity I entertained no doubt, of troublesome excoriations produced on the prepuce and glans by the accumulation of the natural secretion between these parts; and in one case, a young gentleman, 17 years old, much anxiety was felt by his friends and himself in consequence of several of the inguinal glands being also sympathetically affected.

Gleet, which forms the third table, is a chronic affection of the urethra. I need scarcely say it is a most troublesome disease, and in most instances it is to be traced to a neglected or an improperly treated gonorrhœa. It has presented itself to us principally in the young subject. Out of ninety-five cases, seventy-nine occurred between the ages of 18 and 30 years. The disease also would appear to be much more frequently met with in the male than in the female, as only six females were thus affected; and this is not surprising, when we recollect the striking differences which exist between the male and female urethra.

We have had five patients affected with chancre in the urethra. I have been in the habit, for the last ten years, of looking for this affection, and whenever a suspicious case presented itself, I have examined it most carefully. By chancre in the urethra, I do not mean a sore involving the extremity of the glans, being partly within and partly without the urethra, which is common enough, but a sore of an oval shape, occupying the interior of the urethra alone, presenting all the marked characters of a chancre, and always visible to the eye, either in part or wholly. It is not a very common affection. I have seen, probably, as many more as we have had here, in the practice of myself and others; the sores in all the cases were in the portion of the urethra surrounded by the glans penis, and I think it very likely that syphilitic primary sores do not originate higher up in the canal; there is, of course, no saying how far a neglected primary sore within the urethra may extend, but even extension of syphilitic ulceration beyond an inch or so of the urethra is very uncommon to meet with; and as hardness and abscesses, accompanied with soreness to the touch and discharge from the canal, are to be met with, independently of and unconnected with syphilis, it is a very bold declaration to pronounce the existence of chancre in the urethra in the absence of ocular demonstration.

Under the head stricture are included both the spasmodic and permanent forms of this disease. By the term spasmodic stricture is meant a closure of the

urethra, either partial or complete, arising from an inflammatory condition of the canal, which produces spasm of its muscles, and also undue determination of blood, particularly to the vascular structure, called *corpus spongiosum*, which surrounds it. This kind of stricture we have most usually met with in young subjects, who were laboring at the same time under a neglected gonorrhœa, and who pursued a course of life calculated to produce aggravation of all its worst symptoms. In this form of the disease there is no organic lesion, but simply engorgement and muscular irritability. In the permanent stricture the urethra is narrowed or contracted by the deposit of lymph, in general the result, as we have had abundant proof of in this institution, of protracted gleet. There are, of course, other causes of this distressing affection, such as the cicatrices of wounds or of ulcers within the urethra; nay, it is occasionally met with as a congenital disease, and I have known stricture to be hereditary, but of all these matters I shall speak more fully in a future lecture.

One of the cases (the younger) of fistula of the pendulous urethra had its origin in the extraction of a small oval calculus by incision. The edges of the opening, which were hardened, were touched with nitrate of silver for a few days, and after a short time the fistula healed, without any bad consequences remaining. The second case was the consequence of an abscess, which opened externally in the first instance, and afterwards communicated with the urethra. It was much more troublesome to heal than the other, and when it did so it left a hardening and contraction of the urethra. This patient occasionally calls here to have a bougie passed, and probably you will have an opportunity of seeing him.

We have had fourteen cases of gonorrhœa and syphilis, all occurring between the ages of 19 and 31 years. I have seen a sufficient number of such cases to be satisfied of the fact, that both these diseases may be in operation at the same time in the same individual. In some a chancre was situated on the glans, and all the well-marked symptoms of gonorrhœa were also present; in others, buboes existed, and I have constantly seen the exhibition of mercury produce its beneficial effects on both chancre and bubo, without having any effect in curing the gonorrhœa.

It is remarkable that out of thirty-eight patients affected with warts upon the genitals, only two were females. This annoying disease is usually found in young patients whose preputia are long. The excrescences may be situated upon any part of the glans or prepuce, and in size may be found to vary from that of a pin's head to a large walnut. A patient named Fisher, aged 18, applied here last July under the following circumstances. I take the case from my note-book:—He has had warts on his penis for three months. Six weeks ago he could denude the glans with difficulty, when, at last, complete phimosis occurred. The warts continued to increase in size, accompanied with a fetid purulent discharge from the orifice of the prepuce. Present state: Erysipelas of the whole penis, which is swelled to an enormous size; profuse purulent discharge; glans apparently double; much constitutional disturbance. Under the use of a mixture containing tartar emetic and sulphate of mag-

nesia, the constitutional symptoms and erysipelas subsided. In two days the prepuce ulcerated near its junction with the corona glandis, when, upon slitting it up, so as completely to bring the parts into view, a crop of warts fully the size of a large walnut was found attached by an extensive base to half the glans.

Arthritic urethritis is not a very uncommon affection. I have known many patients who have had repeated attacks of gout being subject to a mucous discharge from the urethra, which sometimes assumed a purulent form; in general, I believe, the discharge comes from the prostate gland, as it is greater in quantity just after the patient has had an evacuation from his bowels. It is probably the best practice not to interfere with such a discharge; and it is often a gratification to both surgeon and patient to be assured that the affection has not its origin in venereal.

An inflamed prepuce or vagina is constantly met with in infancy and puberty. The ages of the patients who have fallen under our notice have extended from 1 month to 15 years. This disease is always a great source of anxiety to the parents as well as annoyance to the patients. The inflammation is in general of the erysipelatous kind, and is accompanied by a white irritating discharge from the mucous lining of the parts. It is often connected with derangements in the primæ viæ, with teething, and occasionally with neglect in bathing and cleansing the parts; but this latter cause I do not believe to be so frequent as some imagine, for I have seen the affection take place, particularly in the vagina, where the greatest attention has been paid to the cleanliness of the parts. At puberty when it occurs the cause is sufficiently obvious.

Gonorrhœal rheumatism is next on our list. The existence of this disease has been doubted by many, and has been attributed by others to the remedies employed for the cure of gonorrhœa. We have had to day a well marked instance of this affection in the person of Thomas Fury, aged 19. This patient applied here ten days ago with gonorrhœa, accompanied with severe scalding, and at night with chordee. He has taken none of the medicines which have been absurdly designated gonorrhœal specifics, but has been treated antiphlogistically. The dorsal vein of the penis has been twice opened, and he has been purged with the compound powder of jalap. His scalding is abated; he has had erections, but no chordee; the running is also much diminished. He never had rheumatism; but to day he suffers from pains in the soles of his feet, in his ankles, and in his knees; no other part of his body is affected, and the pains in the soles of his feet are the severest.

I cannot say whether there have been more than four cases of retention of urine admitted, but this number fell to my care. In two of them I opened the dorsal vein of the penis with effectual relief, and the others I treated with the warm bath and bleeding from the arm with equal benefit.

Congenital deficiency of the urethra is not unfrequent. I have seen many other cases of this description besides the three which form the total in our summary. In all the cases I have seen, except one, the urethra was deficient in its under surface as far as the corona glandis, in which situation its orifice was guarded by a transverse fold of skin. The exception

to such cases as these I found two years ago in the dissecting-room, when the urethra was deficient in its upper surface, the glans was completely bifid, and a deep groove led along its medial line to the corona glandis, where the urethra commenced as in the other cases, but upon its upper surface. I shall have occasion in my next lecture to refer to a remarkable case of the ordinary congenital deficiency of the urethra, in speaking of the specific distance of gonorrhœa. In congenital phimosis the prepuce retains its natural structure, but its opening is so small that the patient can only denude the orifice of the urethra and a very small portion of the glans. The glans, as well as the penis itself, is well developed. There is a patient at present in attendance with this affection; his name is Abbott, and his age is 22 years. The size of the orifice of his prepuce is nearly that of a sixpence, and although he has had gonorrhœa three times, there is no alteration in the structure of the part. It is of importance to distinguish in our treatment these cases of phimosis from those which occur from cicatrices or thickening of the prepuce, as different operations are applicable to each; indeed, the latter kind of phimosis is often removed by the cautious administration of mercury.

Hernia humoralis, or gonorrhœal testitis more properly called, in most cases arises from neglect and irregularities, on the part of the patient. We have had 107 cases of this disease, which to the cases of gonorrhœa bears the proportion of 1 in 20. This, however, is not a fair criterion to go by, for certainly more than one of the patients affected with this kind of testitis did not apply to us until the disease was fully set in. It is a rare occurrence to find testitis supervening if the patient is judiciously treated for gonorrhœa, and he observes strictly the injunctions laid upon him. I shall speak of the other forms of testitis we have met with when hernia humoralis comes to be specially considered.

Hydrocele of the tunica vaginalis and of the spermatic chord occurs from a very early period of life to a very late one. In the adult both diseases require much more active treatment than in early life; a mere puncture in the latter will be sufficient in most instances to cure one or the other, whereas in the adult we have had occasion here to use not only a variety of injections but also the seton.

The number of secondary syphilitic cases, which have been admitted to this institution, bear to the number of cases affected with primary symptoms a proportion of something more than one to three. For the same reason I gave in speaking of gonorrhœal testitis, no sound conclusion can be drawn from these premises. It is a most unusual occurrence to find the patients who are treated here for primary syphilis, applying again with secondary symptoms. The cases of secondary syphilis which do apply have in general been under treatment somewhere else, and are truly primary patients with us. This important disease I shall particularly direct your attention to in future lectures. In regard to the patients admitted since we last met, and to which I alluded at the commencement of this lecture, time will only permit me to direct your attention to the cases of Gell, Connor, and Field: in each of whom I opened the dorsal vein of the penis for gonorrhœa in its most aggravated form.

PRACTICAL OBSERVATIONS

ON

DISEASES OF THE SKIN.

By THOMAS H. BURGESS, M.D., &c.

No. I.

ERUPTIONS OF THE FACE.

No branch of pathology abounds with greater interest or opens a more fertile field for pathological research than that which embraces a consideration of the nature, causes, and treatment, of diseases of the skin; yet, strange to say, no other department of medicine has been less cultivated in this country of late years; and while medical science, generally speaking, has advanced, *pari passu*, with the enlightened spirit of the age, this branch of it has been allowed to remain almost in the same state as when Willan and Bateman wrote. Fortunately, however, so important a subject has not been equally neglected in other countries, and to France especially is due the merit of having zealously followed out the principles correctly laid down by the distinguished writers above mentioned. Thus we find the names of Alibert, Biett, Rayer, Cazenave, and others, who have at various periods been attached to the Hospital of St. Louis, associated with all those researches and improved views in dermatology which have issued during the last twenty years from that admirable institution.

It is pretty generally admitted that one of the principal sources of the error which has so long prevailed in the history of skin affections is owing to the want of opportunity of observing the various eruptions from their commencement to their termination—a contingency which must always occur while the practitioner has to depend on the irregular attendance of *out-patients* for his information. This class of patients, it is needless to say, only attend the hospital or dispensary when it suits their convenience and inclination to do so, especially when no urgent symptoms are present, and in nine cases out of ten the physician is enabled to see the disease but twice or three times during its progress. When we recollect the slight difference that exists between a vesicle and a pustule in certain stages of their course, that the bulla of rupia often closely resembles the pustule of ecthyma, and moreover, that the fluid of a vesicle may dry into a scab or incrustation, the fallacy of such a means of arriving at pathological facts and precise descriptions of disease must be sufficiently obvious. To understand thoroughly the nature of the important class of affections under consideration, it is necessary that they should pass before the eye of the student in every phase of their existence, and this desideratum is only to be obtained in an institution like the Hospital of St. Louis, where the patients are admitted and retained during the progress of the disease. I propose in this, and a few subsequent papers, to describe briefly those cutaneous eruptions which are of the most frequent occurrence, adopting for my guide the plan pursued by M. Biett and M. Cazenave at the Hospital of St. Louis during my attendance at that institution.

Of all the eruptions to which the skin is liable, and they are numerous and variable, none excite greater

anxiety in the mind of the patient or practitioner than those which occur on parts of the body constantly exposed to view, as, for example, the hands, the neck, the face, the scalp, &c. It is unnecessary to dwell here on the importance of accurate acquaintance in a diagnostic point of view with the particular affections alluded to; for although they may not be sufficiently serious to involve life, still their existence is a source of continual annoyance to the patient, and nothing is more likely to prolong the evil than an error in diagnosis at the onset.

Eruptions of the face are so numerous, and above all so conspicuous, that they demand our attention in the first place. The tendency of the capillary system of the face to be overrun with blood, disposes it to become more frequently the seat of a multitude of affections than any other part of the body. Erysipelas, for example, is more frequently detected in this region than in any other; it is the principal seat of the pustules in small-pox, and of other equally familiar examples. The face may be attacked by almost every disease to which the skin is liable; but I only intend to treat in this place of those particular affections which appear most frequently in that region. The mildest affection, perhaps, that occurs on the face is that variety of pityriasis, which the French call *dartre farineuse*. It is met with in individuals of a delicate transparent skin, and especially in young girls. It is characterised by a peculiar mealy or *farinaceous* desquamation, which distinguishes it from every other affection, and is so mild and transitory in its nature as to require scarcely any treatment. If it should persist, however, longer than usual, a mild laxative and any bitter infusion containing from one to two drachms of the carbonate of potass to the pint will soon effect a cure.

The same class of individuals are also subject to another mild eruption of the face—*herpes circinatus*—which bears some resemblance to the preceding affection in its farinaceous appearance; but the desquamation is not so abundant in this as in the former case. This eruption is frequently seen in the form of rings on the cheeks and chin of young people of either sex of a fair and delicate skin. The rings are studded round with extremely small globular vesicles. Their centre is generally free, and the border red. When the herpetic rings are small the circular border is pretty broad, and the red color extends beyond the vesicles to the same distance on either side. The vesicles usually terminate about the eighth or tenth day by desquamation, leaving merely a slight degree of redness behind, which gradually disappears. The rings of *herpes circinatus* are liable to be mistaken for diseases of a much more serious nature and very different character to itself—namely, *lepra*, *porrigo scutulata*, *lichen circumscribitus*, and I may take this opportunity of observing that one of the most important features connected with the history of cutaneous diseases generally, and those of the face especially, is their differential diagnosis. Amongst the great variety of eruptions to which the face is subject, it is obvious that there must be a considerable variation in the degree of severity of each, and in their appropriate treatment; hence the importance of an accurate knowledge of their diagnosis.

For example, a small herpetic ring, the vesicles of

which are slightly exfoliated, situated on a perfectly round and red surface, may often be mistaken for a patch of lepra without scales. It is needless to dwell on the evil results, both as regards the treatment and the peace of mind of the patient, sure to follow an error of the kind; but happily this mistake may easily be avoided, and cannot occur to any careful observer, for the depression in the centre and the prominent border of the leprous patch, may readily be distinguished from the even surface and the debris of vesicles so characteristic of the rings of herpes. Besides, there are generally several patches of lepra present at the same time, some of which are sufficiently developed to indicate their real nature. Again, *herpes circinatus* may be confounded with *porrigo scutulata*, the name *ringworm* being erroneously applied to both. However, one is a vesicular and the other a pustular affection. The latter is of long duration, forms thick scabs, is contagious, destroys the hair when it occurs in that neighbourhood, while the former is a mild affection, lasts but a short time, is not contagious, never destroys the hair, and terminates by desquamation, or by insensible exfoliation. The rings of *lichen circumscribitus* are not much larger than those of *herpes circinatus*, and hence it is sometimes difficult to distinguish one from the other. Here we must depend principally on the nature of the elementary lesion for a means of diagnosis, which in the former case is a papule, whilst in the latter it is a vesicle. The nature of the eruption once ascertained, the treatment is exceedingly simple, and very similar to that required for the variety of pityriasis already described, the only additional remedies necessary being mild alkaline lotions. The disease is very slight, and is not long in disappearing.

There is another variety of herpes—*herpes labialis*—frequently met with on the face. It is generally produced by cold air, by the contact of acrid fluids, or by gastric derangement. Although, generally speaking, it is a mild affection, it is, nevertheless, frequently ushered in by an exceedingly smart feverish attack. This variety appears in the form of small groups of vesicles scattered irregularly round the lips; some of these vesicles remain distinct, whilst others run into one another and form a small scab. The surface on which the eruption is developed becomes red and swollen, and it is attended by a disagreeable smarting sensation. The vesicles are of various sizes, but the largest does not exceed the size of a small pea. *Herpes labialis* runs its course rapidly. The incrustations formed by the debris of the vesicles disappear in the course of three or four days, leaving a small red stain behind, which in its turn gradually fades off. If not injudiciously interfered with, this slight affection requires scarcely any treatment; a mild aperient, and a lotion containing two or three grains of sulphate of zinc to the ounce are [all the remedial measures necessary. The progress of the eruption is sometimes shortened by transfixing the vesicles individually as they ripen with a fine-pointed needle, and allowing the contained fluid to escape without exposing the surface.

Lichen.—There is another affection, of a severer character than either of the foregoing, which we frequently observe on the face in young persons—that is *lichen agrius*. It is characterised by an eruption of very small acuminate, inflamed papule, developed

on an erythematous surface, and accompanied by severe heat and smarting, instead of the distressing pruritus which attends the other varieties of lichen. The papulae become confluent, and are surrounded by a small reddish areola. They soon become red themselves. Slight ulcerations form on their apices, whence issues a sero-purulent fluid, which concretes, and forms yellowish incrustations of various degrees of density. The disease may continue in this state for several weeks, or under peculiar circumstances it may pass into the chronic state and terminate by slight exfoliation. It does not interfere with the general health of the patient, and generally attacks those of strong and vigorous constitutions. Although the diagnosis of lichen is often attended with much difficulty, this variety of the disease can hardly be mistaken for any other eruption of the face. Even in its most confluent form there are always papulae to be found scattered round the morbid parts, which will readily distinguish it from impetigo, eczema, and psoriasis—the only diseases to which it bears any resemblance. When the eruption assumes an obstinate and severe form, strict regimen and a course of mild purgatives will be necessary; sometimes the application of leeches round the diseased parts is attended with considerable benefit at the onset, and at a later period dilute nitric or sulphuric acid administered in barley water will be found very serviceable. In extreme cases the arsenical preparations have been found necessary, but I shall reserve my remarks on this point for a future period, when I purpose treating of lichen generally.

Impetigo.—A variety of this disease, known under the name of *impetigo figurata*, appears more frequently on the face than on any other part, and gives the countenance a peculiar and repulsive appearance. It generally attacks the same class of persons as the two previous eruptions, and is liable to occur periodically for years. It first appears in the form of small, distinct, red, and slightly raised patches, which soon become studded over with minute pustules, finally running into one another. These patches generally remain distinct, but they sometimes coalesce by the development of a fresh crop of pustules between them, and then the disease spreads considerably over the face. At certain irregular periods a variety of examples of this disease are to be seen in the wards of the hospital of St. Louis, while at others there is scarcely a single case present. The influence of season may have something to do with this epidemic character of the disease, if I may so call it, for I have observed that more cases of the eruption occurred in spring than at any other period during my attendance at that hospital. But in other years that season passed over without the appearance of the disease. In some instances I have seen the eruption commence on the wings of the nose, and spread gradually to the cheeks on either side; and in other cases it only appeared on one cheek or on the chin, where it remained, and pursued the usual course. The pustules burst in the course of thirty-six to forty-eight hours, when the contained fluid concretes and forms scabs, which increase in volume by a continued exudation from the diseased surface. These incrustations present a yellowish appearance in some points and are greenish in others, and are not unlike layers of concrete honey or

the gummy exudation of certain trees. The disease sometimes appears on the lips, in the form of moustaches, when the scabs are thick and the subjacent parts indurated and swollen. The duration of this eruption is very variable. In some cases a cure is accomplished in the course of fifteen days, whilst in others the eruption persists for a much longer period, especially when successive eruptions appear. High living, violent exercise, and strong moral passions are frequent causes of the disease.

Impetigo figurata can hardly be confounded with other diseases of the face by any careful observer, yet instances have occurred in which the scabs that appear on that region during the syphilitic eruption have been mistaken for those of impetigo. It is needless to say that such an error could not occur to any person at all acquainted with the characteristic phenomena of either complaint. When the disease under consideration appears on the chin, it requires some little attention to distinguish it from sycosis, another eruption of the face which we shall have to speak of by and by. The pustules of impetigo are small, yellow, and set close together, the scabs are thick and of a yellowish green color, whilst those of sycosis are much larger, not confluent, and not so yellow as the former. Besides the exudation is by no means so copious in sycosis as in impetigo figurata, and the scabs are of a darker color.

When impetigo figurata assumes an acute character, it is, generally speaking, a slight affection, and requires but simple treatment. When the inflammatory symptoms are pretty smart, a few leeches should be applied behind the ears; but in general cooling lotions, acidulated drinks, and a few mild laxatives, are the only measures required, at least at the commencement of the treatment. At a later period weak alkaline lotions and the vapor douche may be employed with benefit. The preparations of sulphur should not be used in the acute form of this eruption. They often do a great deal of mischief, and are only to be administered when it assumes a chronic character, and even then with caution.

Psoriasis.—There are two varieties of this disease which may be classed amongst the eruptions of the face—these are, *psoriasis ophthalmica* and *psoriasis labialis*. These eruptions invariably appear in the form of a circle of three-quarters of an inch or one inch in breadth, which completely surrounds the mouth or the eyelids, as the case may be. This circle, which is composed of pretty large scales, is indented with a number of transverse lines, which extend to the borders of the lips or eyelids, giving to these particular parts an extremely disagreeable and unseemly appearance. The eyelids are often much swollen, and become tender and painful when moved. When the disease is confined to this part it is frequently attended by a smart itching, and sometimes spreads to the conjunctiva, when it assumes a very obstinate character. *Psoriasis labialis* should not be confounded with eczema, which it often closely resembles. Both diseases exhibit the same kind of chaps or fissures; but the absence of vesicles—the elementary lesion of the latter—the large size and hardness of the scales, and the thickness of the epithelium, are sufficiently diagnostic of the former to prevent a mistake of this kind from occurring. These eruptions of the face are, generally

speaking, very obstinate and very rebellious. They require the same plan of treatment as psoriasis in general, which I may have occasion to speak of at a future period, and shall therefore dismiss the subject for the present, merely observing that the application of three or four leeches behind each ear at the commencement of the treatment in psoriasis ophthalmica, and at a later period frictions, with an ointment composed of the protochloruret of mercury, which is also an appropriate remedy in cases of psoriasis of the lips, will be found exceedingly beneficial.

Before concluding, I would beg to call the reader's attention again to the importance of accuracy of diagnosis in cutaneous pathology, and the necessity of this may be seen from the striking difference—a difference not only of degree but of kind—which existed in the nature and severity of the various eruptions of the face described in this paper. For example, we have seen that the two first—pityriasis and herpes—are very slight and transitory affections, if they are not injudiciously interfered with, or mistaken for other eruptions requiring more active treatment. How different from these in their nature and progress are the varieties of psoriasis which attack the lips and eyelids! We have seen that the latter are often rebellious and intractable diseases, and yet the regions they occupy are not unfrequently the seat of other eruptions of a different order and far milder character, and, nevertheless, one has been mistaken for the other. In a word, the treatment of a great number of cutaneous affections is but of secondary importance compared with their differential diagnosis. Many of them will get well almost without any treatment, provided they are allowed to pursue their natural course; and, on the other hand, a mild and simple eruption, by being mistaken from a similarity of external appearances for one of a severe and rebellious character, and treated accordingly, may be aggravated and prolonged for an indefinite period. A case in point came under my observation at the Hospital of St. Louis in 1836, in which herpes labialis had been mistaken for psoriasis of the lips, and sent to the hospital under that impression. However anomalous such an error may appear, the parts were so completely altered from the appearance they usually present when the seat of the vesicular eruption, by the erroneous treatment employed before admission, that it required considerable care and attention to ascertain the nature of the disease. There was no elementary lesion present, and the diseased surface was abraded, chapped, and furrowed. The appearance of a few vesicles the following day, however, revealed its true nature, and a cure soon followed. The patient was suffering at the same time from eczema of the legs.

29, Margaret-street, Cavendish-square.

Dec. 30, 1842.

SUDDEN DEATHS AT STRASBOURG.

The causes of death, as ascertained in twenty-six cases of sudden death at Strasbourg, by post-mortem examination, were as follows:—Apoplexy (cerebral hæmorrhage), 1; serous apoplexy, 1; cerebral congestion, 4; cerebral and pulmonary congestion, 1; hæmoptysis, 1; foreign bodies in the bronchi, 2; pulmonary congestion, 13; syncope, 1; perforation of the intestines, 2.—Total, 26.

ON THE USE OF THE PROTO-IODURET OF IRON IN THE TREATMENT OF PHTHISIS.

By A. DUPASQUIER,
Physician to the Hotel-Dieu of Lyons.

After having devoted five or six years to experiments with the ioduret of iron in cases of phthisis, I published, about a year ago, some observations on the mode of administering this remedy. It had been my intention to follow up this memoir by one on the treatment of pulmonary consumption with the proto-ioduret of iron, but as I have hitherto been prevented from want of time, I avail myself of an interesting paper on the same subject, drawn up by M. Boissière, one of my *internes*. This paper I publish without the slightest alteration, merely adding to it a few notes.

On the Use of the Proto-ioduret of Iron in Phthisis
By M. Gilbert Boissière, late interne at the Hôtel-Dieu, Lyons.†

The present memoir is founded on the study of twenty-seven cases of pulmonary consumption, observed during a period of four months, in the wards of M. Dupasquier. The restricted number of patients, and the short time during which they were submitted to observation, must plead as an excuse for the imperfections of my essay; still upon some points I have been able to collect a number of facts sufficient for the deduction of certain conclusions.

I must observe, in the outset, that it was much easier to determine the influence of the proto-ioduret of iron on certain functions and on isolated symptoms, than its action on the progress of the disease, taken as a whole; to ascertain the former a few days' observation sufficed, to settle the latter it would have been necessary to follow every case to its termination, but of the twenty-seven cases which I observed, seven died before the remedy had time to act, and of the remainder only one was discharged cured. Still, though we can reckon only a single cure, the improved condition of the other patients was sufficiently striking to authorise me to declare that the proto-ioduret of iron is the most efficacious remedy that the physician can have recourse to in cases of pulmonary consumption.

Physiological Action.—Under this head I would place all the phenomena observed during the use of the remedy, and which have no relation to the symptoms of phthisis. They are primary or secondary.

a. Primary Effects.—Having experienced these myself, after taking a dose of twenty drops,* and having found, on questioning the patients, that they experienced similar effects, it will suffice to relate what I felt myself. Before taking the proto-ioduret, I examined the pulse carefully on three occasions, at intervals of ten minutes, and found that it beat regularly seventy-five times in the minute. After a quarter of an hour the pulse had risen to 85, and I felt some

* The preparation employed by M. Dupasquier is a pure proto-ioduret of iron, in which the iodine is completely saturated by the iron. The solution, which is very similar to that prepared by Mr. Squire, contains one part of the salt to five of water.—Eds.

headache; after an hour the mouth was cool and there was slight dryness in the throat; the pulse had now fallen to 80, but the headache remained.

b. Secondary Effects.—When the remedy is administered in small but gradually increased doses for eight or ten days, the sensations just noticed are felt in a permanent manner; after this the organs become accustomed to it or they may be slightly irritated, and this irritation may continue during the whole course of the treatment. The mucous lining of the mouth and pharynx may be the seat of burning pain with tumefaction of the mucous membrane, which is red and often covered by a small papular eruption; this state is often attended by loss of appetite, thirst, and a remarkable change in the sense of taste. In some cases mastication is completely prevented by the pain arising from the contact of food. This local inflammation is, however, rare; it occurred only four times in the twenty-seven cases.

In one half of the cases the patients suffered from nausea and vomiting on the first or second day of treatment; but these symptoms seldom continued longer; they seem to depend rather on irritation of the velum palati and uvula than of the stomach; although in one case the latter organ appeared chiefly to have been affected. On the whole it may be stated that the first impression of the ioduret of iron on the digestive organs is slightly irritant; but tolerance of the remedy is soon established, and it then acts as a tonic.

The same exciting and subsequently tonic action is also exercised on the circulatory system, and on the apparatus which produces animal heat; the pulse becomes more rapid, and the heat of skin is increased during the first few days; and this increase appears to me to be proportionate to the weakened condition of the patient.

In a fortnight or three weeks, however, the pulse loses much of its frequency, and becomes more full and strong; the heat of skin subsides, is more uniform, and the patient is better able to resist atmospheric changes than he had been.* While the effects just noticed are being produced the patient's countenance becomes slightly florid; the muscles and flesh get firm instead of flaccid, as they were; and in some cases symptoms of plethora set in, accompanied, or not, by signs of local congestion. In an early stage the lungs are commonly the seat of this congestion, as is seen by the increase of dyspnoea, cough, and sometimes slight hæmorrhage; in other cases the head is affected, and the patient complains of headache, loss of sleep, pains in the eyes, ringing in the ears, &c. In three cases the remedy gave rise to some affection of the skin—as urticaria, eczema, and lichen.

* This acceleration of the pulse is primary, and depends on the excitement produced by the remedy; it is sometimes of very short duration, but in other cases persists for a considerable time. Very frequently, however, after a few days' trial of the remedy, the number of pulsations is very considerably diminished, and this, generally speaking, is a good sign, and shows that the remedy is producing all the good that can be expected from it. In a few cases the patient is materially benefitted even though the pulse continues quick; but when the pulse has been much accelerated in the first instance, and continues so for some time, we have little to hope from the administration of the remedy.—A. DUPASQUIER.

In the following sections I shall examine successively the ioduret of iron; 1st, on the symptoms of phthisis, taken separately; 2nd, on the different periods of the disease; and 3rd, on its different forms.

1. LOCAL SYMPTOMS.—*Oppression.*—Under this term are comprehended two very different symptoms, dyspnoea and accelerated respiration. In many cases these two symptoms coexist and seem to be confounded together, but in others they are perfectly isolated. They are, however, quite independent of each other; I have seen one persist after the disappearance of the other; or one increase while the other symptom was gradually subsiding. With a few exceptions, it may be laid down as a general rule, that during the first days of the administration of the remedy the dyspnoea and frequency of respiration are increased; but after the first or second week they gradually decrease, and finally disappear. The frequency of the respiratory act diminishes much more rapidly than the dyspnoea; and the latter often remains when the frequency of the respiration has been reduced to its normal standard. Still the difficulty of breathing is always removed, if we are enabled to continue the remedy sufficiently long to dissipate the congestion and effusion which surround the tubercular deposits. When, towards the end of the treatment, the dose of the ioduret is suddenly and considerably increased, the frequency of the respiration is also greatly increased, while the dyspnoea either subsides or remains stationary.

Hæmoptysis.—As I have already remarked, the ioduret sometimes determines slight discharge of blood from the lungs, during the first few days of its administration; but this rarely occurs, and when it does happen the hæmoptysis is slight, and disappears as soon as the tonic influence of the remedy is felt; besides, the manifest benefit which results from its use in cases of hæmoptysis occurring in the first period of phthisis, should render our minds quite easy upon this point. In two patients admitted into M. Dupasquier's wards with hæmoptysis, I saw the hæmorrhage promptly arrested by the ioduret; and I have remarked that this symptom was of much rarer occurrence in the wards of M. Dupasquier than amongst other patients who were not treated with the ioduret of iron.

Cough and Expectoration.—During the first few days the cough is somewhat more frequent, the expectoration more abundant, but easier; on the fourth or fifth day these two symptoms diminish in intensity, and the relief is so progressive that in three weeks or a month the patient, who before that coughed constantly during the whole day, and scarcely enjoyed a quarter of an hour's repose, now coughs only four or five times a day, or perhaps once or twice. The quantity of matter expectorated is likewise considerably diminished; in a month it is often reduced by one-half, three-quarters, or even seven-eighths. I have seen patients who expectorated twelve ounces daily, spit not more than an ounce in the twenty-four hours, and in a few cases the expectoration ceased altogether; in six cases both the cough and expectoration disappeared entirely; in four the expectoration ceased after forty days; in the other two after the fifteenth day.

I have but few remarks to make on the influence of

the remedy over the quality of the matter expectorated; it seemed to me that the sputa became thicker, while they diminished in quantity, being more viscid, and the expectoration more and more difficult.*

Pains in the Chest.—The pains of which I now speak are those peculiar to consumptive patients; they occupy the interscapular region or walls of the thorax, and appear to arise from sympathy with the affected parts underneath. I have always seen these pains yield within three weeks or a month; but the ioduret of iron never seemed to have any influence on pleuritic pains, or on those seated in the walls of a cavern.

2. PHYSICAL SIGNS.—*Tubercles.*—The physical signs of the presence of tubercles in the pulmonary tissue are—bronchophony, intense and prolonged expiratory sound, bronchial souffle, roughness of the vesicular murmur, dulness on percussion, and thoracic *fremissement*. It is evident that if all these signs disappear completely after the administration of the ioduret of iron for a sufficient time, we are entitled to conclude that the tubercles have disappeared, and that diminished intensity or extent of the physical signs indicates a proportionate diminution of extent or intensity in the tubercular deposit. I have seen only six cases, in M. Dupasquier's wards, of crude tubercle, without caverns; in no case did I witness complete removal of all the signs above indicated, even on one side of the chest. In one case no diminution of the physical signs occurred; but in the other five I detected some remarkable changes. Thus, in two patients the expiratory sound and the bronchial souffle completely disappeared, and the respiratory murmur was restored to its natural state; the other signs had not disappeared, but they had diminished more than one half in one of the cases at the end of two months, and in the other at the end of fifteen days. In three cases the intensity of the bronchophony had diminished one half at least; and the dulness of sound and *fremissement* were equally diminished. I remarked that the diminution of the extent over which the physical signs were observable generally kept pace with the diminution of intensity, and that it always took place from below upwards, commencing at the limits between the diseased and healthy tissues, and being more rapid in the lung which was least affected.

Caverns.—I shall only notice such physical signs of cavern as are admitted by all authors—viz., pectoriloquy, gurgling, and the cavernous souffle; to these M. Dupasquier adds the peculiar character of the *fremissement*. In two of eight patients affected with cavern, and who are still alive, the pectoriloquy and gurgling have completely ceased; in one of the two there remained some bronchophony and slight cavernous respiration; in the other these two latter symptoms, also, completely disappeared; but it should be remarked that in the two cases now alluded to the caverns were very circumscribed, the physical signs not occupying a space greater than the area of the stethoscope. In the six remaining cases all the phy-

sical signs of excavation remained, although a remarkable improvement had taken place in every other symptom.

General Symptoms.—The most important of these are the gradual emaciation and loss of appetite, the gradual loss of strength, night sweats, and the evening exacerbations. In three of the six cases of phthisis in its first stage, already noticed, the night sweats and evening fever were absent; in two of the remaining three cases the nocturnal perspirations persisted for three months, but during that time they gradually diminished, and are now scarcely perceptible; in the third case they disappeared entirely at the end of a fortnight. In six of the eight cases of cavern the perspirations were not modified; in two they ceased after forty days; the two latter were the cases in which the physical signs of cavern had also disappeared. From these facts it follows that the ioduret of iron exercises a beneficial influence on the cutaneous exhalation from phthisical patients in certain cases at least. But its influence on digestion and nutrition is much more evident. Every one of the patients (in a period varying from eight to fifty days) recovered their appetite; the weight over the epigastrium and febrile paroxysm during digestion ceased; the face lost its earthy hue and assumed a good color; the emaciation in some cases ceased altogether; the softness and flaccidity of the flesh disappeared; and the muscular strength was restored. Several patients who had been admitted in such a degree of weakness as to be unable to stand upright or walk, were after some time enabled not only to walk about for half the day, but to take fatiguing exercise.

With respect to the influence of the ioduret of iron on the different periods of phthisis, I must content myself with recording M. Dupasquier's opinion that it is most efficacious in the third period, or, at least, that its action is then most evident, and more so in the second stage than in the first. The same difference of action holds good with respect to constitutional and accidental phthisis; the former is much more susceptible of benefit from the ioduret of iron than the latter; in the three cases which I saw, the use of the remedy was attended by no benefit whatever; hence my remarks on the use of the ioduret should be understood as applicable, almost exclusively, to constitutional phthisis.

Mode of Administration.—As the proto-ioduret of iron is rapidly decomposed by the contact of air, it should only be prepared as it is required for use. As a vehicle the syrup of gum is the best medium in which we can give it, and after the syrup come effervescing waters or distilled water. The decomposition of the remedy is easily known by the greenish and then the reddish brown color which the fluid containing it assumes.

The solution employed by M. Dupasquier contains about one part of the ioduret to five of distilled water. The dose to commence with is generally fifteen drops, but when the patient is very weak or young ten or five drops will be sufficient. As soon as tolerance of the remedy is established, the dose is to be increased by five or ten drops every two or three days until 120 drops are taken, and this dose is continued, or the use of the remedy is suspended for a week, and it

* I have observed that the sputa gradually lost their purulent character, and assumed the catarrhal or mucous one. This is explained by the energy and rapidity with which the ioduret of iron diminishes the supuration from vomicae, whereas its action on the secretion in cases of chronic bronchitis is much less marked.—A. DUPASQUIER.

is again given in the dose of fifteen or twenty drops.

Whenever any unusual or suspicious symptom manifests itself during the administration of the remedy, it is suspended to see whether the occurrence of the accident may depend on it or not. Thus it may give rise to headache, loss of sleep, and palpitation; but these, as well as derangements of the digestive organs often disappear of themselves.

The remedies employed by M. Dupasquier, in conjunction with the ioduret of iron are—claret wine, Hoffmann's elixir, bark and the bitters, effervescing draughts, opiates with conserve of roses, and some of the astringent vegetable substances; finally, the pectoral drinks commonly employed to allay the bronchial irritation. The regimen which he enjoins is almost exclusively animal; he makes the patients clothe themselves warmly and take as much exercise as their strength will permit.—*Gaz. Med. de Paris*, No. 52.

CASE OF CHOLERA.—SIMPLE TREATMENT OF DISEASE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—As I consider journals like yours principally useful to general practitioners, medical assistants, and medical students, from the preference you give to practical points, good cases, and clinical observations, over queer novelties, strange coincidences, and theoretical speculations, I send the following case and remarks for publication, should they meet your approbation.

I was sent for on last Tuesday morning to see a poor man who had been vomiting and purging all the previous night, and who was not expected to live another hour. I found him laboring under all the symptoms of Asiatic cholera—constant vomiting; incessant purging; stools like rice water; face pale and shrunk; the tongue and lips as pale as the face. He spoke in whispers, and the cramps were almost intolerable. I ordered a large mustard poultice to his abdomen, a bottle of hot water to each of his feet and hands. I gave him four pills with two grains of calomel in each, one to be taken immediately, and repeated every hour; and also a mixture with one drachm of laudanum, three drachms of syrup of poppies, and eight ounces of water. Two tablespoonfuls to be taken every half hour.

In about an hour reaction commenced; two hours after the vomiting and purging stopped, the cramps ceased, and the man recovered.

Now, it is to simplicity in prescribing medicine for such cases that I wish to direct the attention of your readers, and also to endeavour to carry out an observation often made by the late Dr. Babington—viz., "That medical men in general were too careless as to the vehicles with which they combined active medicines; and that he had known many cases of affections of the brain and nervous system made worse by medical men ordering camphor mixture in place of plain water, with other medicines which might have done good. The camphor mixture had acted as a stimulant, and thereby prevented sleep and rest, which were the objects most desired." I have found the same remark to hold good in cholera and other cases where the stomach is affected—that the mint and other aromatic

waters, camphor mixture, spirit of lavender, &c., &c., increase the irritability of the stomach and cause medicines to be thrown off, which, if mixed with common water, might have had the desired effect. The same remark applies to pills: if calomel be made into pills with bread or mucilage, it is much more likely to remain on the stomach than if made up with any of the confections or extracts. As to ointments and lotions I need not say a word, as we can tell by the eye, at once, whether they have soothed or irritated, and the different effects from fresh and rancid lard are obvious to every person.

In cases of English cholera where chalk is indicated, the simple chalk mixture with laudanum will be found more effectual than if combined with aromatics and stimulants.

The good effect of hydrocyanic acid in relieving sickness at stomach is often prevented by not giving it with water alone, or simple syrup and water; syrup of orange-peel, syrup of saffron, or any other apparently harmless adjunct, might counteract the effect of small doses of the acid.

Therefore, in all cases where the brain or head is affected, or where the stomach is delicate or irritable, we ought not to give even infinitesimal doses of medicines which are not absolutely necessary. Nor will this be wondered at for a moment when we reflect upon what is called the idiosyncrasy of some people. One will faint away on perceiving the least smell of musk, another will be sick with the smallest quantity of ipecacuanha, another will be thrown into fits at the sight of a cockroach, and another will be salivated with a grain of calomel. When such important effects result from these apparently trifling causes, surely we cannot be too particular in avoiding adjuvants (?) which may possibly defeat the objects we have in view. I hope also the day is gone by when English practitioners found it necessary to pay more attention to taste, color, and smell, than to scientific formulæ. This was one of the evils of their being obliged to charge for medicines and not for visits, which I hope an enlightened legislature will soon remedy.

I am, Gentlemen,

Your most obedient servant,

W. SIMPSON.

4, High-street, Bloomsbury,
December 31, 1842.

BIRMINGHAM ROYAL SCHOOL OF MEDICINE.

CLERICAL MUNIFICENCE.—That truly noble and munificent benefactor of mankind, the Rev. Dr. Samuel Wilson Warneford, has placed in the hands of William Sands Cox, Esq., the founder of the Royal School of Medicine and Surgery at Birmingham, the sum of *One Thousand Pounds* in furtherance of the intended collegiate institution for the board, lodging, and care of medical and surgical students. A sum of £50 has also been presented by the Rev. Vaughan Thomas, of Oxford, for the same purpose; and we understand that a letter on this subject from the pen of this highly talented and accomplished scholar will be shortly submitted to the noble patrons and friends of the school.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JANUARY 7, 1843.

In resuming our notice of the report of Mr. Chadwick on the sanitary condition of the laboring population, we shall take up the section in which that worthy functionary endeavours to prove the inefficiency of boards of health in all matters of public hygiene, and the necessity of entrusting the health of her Majesty's subjects to the poor-law commissioners instead of doctors, surgeons, and other like ignorant individuals.

It must be confessed that the self-sufficiency of the poor-law secretary has carried him to the most inconceivable lengths, in his estimate of other men's capabilities, as compared with the universal aptitudes of his employers at Somerset-house. The commissioners of sewers, we are told, know nothing whatever of the principles on which sewerage should be conducted; and the eminent engineers whom they have employed are a parcel of good-for-nothing sinecurists. In like manner medical men are incapable of applying their knowledge of the causes of disease to the preservation of the public health, which should be entrusted to boards of guardians, Mr. Chadwick, and the poor-law commissioners. In fact, the commissioners know everything, and the pretence of any man or body of men to special knowledge on any particular subject is an impertinent presumption—an intrusion upon the domain of the aforesaid commissioners. Indeed, so rapidly is this feeling gaining ground in the minds of these gentlemen that we should not be astonished were Mr. Chadwick, in his next report, to prove that Sir Robert Peel is no statesman, Lord Lyndhurst as ignorant of law as an attorney's clerk, and his Grace of Canterbury little better than a gravedigger—for the purpose of showing that the whole machinery of church and state—the souls and bodies of twenty-five millions of people—should be delivered over to the immaculate triumvirate of Somerset-house.

It is true that no attempt has yet been made to subjugate the church, but the commission has openly avowed its determination to take the bodies of her Majesty's subjects under its especial protection. In Ireland a desperate effort is now being made to place the medical charities under the control of the poor-law commissioners; and although the Irish gentry, the medical practitioners of Ireland, and the sick poor, indignantly reject their proffered services, it is greatly to be feared that the commissioners will succeed in their attempt. In England, so monstrous a scheme would not be listened to for a moment; hence other ground is broken, and the poor-law commissioners modestly propose that they be permitted to constitute themselves a permanent board of health.

To support this proposition, Mr. Chadwick has written a chapter on the inefficiency of medical boards of health; but, either from certain misgivings, or a tendency to obscure the truth and mystify the public, there is much difficulty in ascertaining his plans or comprehending his arguments.

Mr. Chadwick set out with the assertion "that it has been shown, by the evidence collected in the present inquiry, that the great preventives—drainage, street and house cleansing, by means of supplies of water and improved sewerage, and especially the introduction of cheaper and more efficient modes of removing all noxious refuse from towns—are operations for which aid must be sought from the science of the civil engineer, not from the physician, who has done his work when he has pointed out the disease that results from the neglect of proper administrative measures, and has alleviated the sufferings of the victims."

In this code of doctrine the function of the medical man is confined to the administration of physic, while the scavenger is the only true preserver of the public health. Having made this notable discovery, Mr. Chadwick proceeds, after the manner of logicians, to a process of "simple conversion," and as he has shown that scavengers are medical men, so he demonstrates that medical men are scavengers—in his theory of public hygiene. Thus the chief duty of his medical officers would be to have the streets drained, the filthy tenements cleansed, to remove all noxious refuse from towns, and to provide a sufficiency of soft water for the ablutions of the great unwashed.

Now, although, as Mr. Chadwick observes, "the examination of loathsome prisons has gained one individual a national and European celebrity," it cannot be expected that any body of eminent medical men would undertake the performance of such duties; hence he proposes that they be conferred on the medical officers of unions.

"Whilst experience (says Mr. C.) gives little promise of inquiry from such a body as boards of health without responsibilities—(when did a medical board of health shirk any inquiry entrusted to it?)—still less of any important results from the mere representations of such bodies separated from executive authority, I would submit for consideration what appears to me a more advantageous application of medical science—viz., by uniting it with boards having executive authority."

These boards are, of course, boards of guardians; the medical science is the poor-law medical officer, and the controlling power which is to direct, all the poor-law commission.

In this rapid notice of Mr. Chadwick's argumentation against medical boards of health, we have been rather desirous of indicating the object of the poor-law commissioners than of refuting the assertions of their secretary. That object is to seize upon the ad-

ministration of all measures concerning public health in the United Kingdom. Is the medical profession prepared to bear this new yoke? Are we to sink quietly under the rule of the commission, and receive instructions affecting the health of millions from a trio of ignorant laymen? As to the arguments of Mr. Chadwick they are unworthy of serious consideration. The basis of his argument is either a misconception or misstatement of the duties which devolve on the medical profession. The physician, fully aware of the imperfection of his art, is as anxious to prevent disease as to cure it; and one of his most important duties is the investigation of the causes of sickness. The removal of the cause, when pointed out, may be entrusted to any body that the legislature may select. If the commissioners must have a finger in the work, let them send their assistants to cleanse streets and remove dunghills; but the duty of enlightening the executive on the science of public health must be left to those who have made that science the subject of long and careful study.

REVIEWS.

The Physical Diagnosis of Diseases of the Lungs.
By WALTER HAYLE WALSHÉ, M.D., Professor of Pathological Anatomy in University College, London; Physician to the Hospital for Consumption, &c. 8vo. pp. 320.

The plan of this volume differs from that of all elementary treatises on pulmonary diagnosis in this circumstance, that every method of physical examination is fully described in its pages; inspection, application of the hand, mensuration, percussion, auscultation, succussion, receive each their proportional share of attention, and an important mode of investigation which has never before been considered in a general point of view—namely, the determination of the situation of surrounding parts and organs is explained at considerable length.

In the first of the three parts, into which the work is divided, a general description is given of each of these methods, embracing an inquiry into:—1. Its nature; 2. Its direct or immediate object; 3. The manner of practising it; 4. The conditions which are discovered by its means in the healthy state; 5. Such deviations from the ordinary standard of these conditions as are nevertheless compatible with health; 6. The deviations from that standard which are actually pathological, and constitute signs of disease. The minuteness, accuracy, and perfect completeness of these descriptions (every division of which is conducted on a regular plan) are as remarkable as the smallness of the space they occupy—a result which could only have been obtained by the exclusion of almost an irrelevant word.

The second part consists of a table of the physical cause and ordinary seat of all the morbid signs in connection with the names of the affections in which they occur, and also a synopsis of the combined signs of pulmonary diseases. The third part forms a series

of annotations upon the two preceding. Here are collected critical inquiries into numerous doctrines of importance, based upon and elucidated by Dr. W's. own experience—many difficulties in theory and practice being happily removed, and not a few prevalent errors satisfactorily exposed.

Among the types of unhealthy respiration described by Dr. Walshe, are two in particular, which are presented to us in rather a new light. These are “divided” and “jerking” respiration, conditions depending upon a modified state of the rhythm of that act. We extract the description of the latter.

Jerking Respiration.—When the movement of inspiration, instead of being accompanied by a murmur continuous from the outset to the close (which may be represented thus ~~~~~), is attended with a sound of an interrupted character, divided into several unequal parts (thus ~ | ~ | ~ | ~, &c.), the respiration may be called *jerking*. The expiratory sound does not possess this peculiarity, but is generally somewhat increased in duration, while the inspiratory is certainly somewhat decreased in this respect. The special character of the inspiration may have a tendency to harshness, and (by an exception to the general law) more than that of the expiration.

Jerking respiration may exist through an entire lung, when it deserves the name of *general*; or be limited to a certain spot, when it may be called *partial*.

The second part of Dr. Walshe's treatise is a synopsis of the physical signs of diseases of the lungs. It is impossible to convey a greater amount of practical information in a few pages than is contained in this condensed history, which is characterised by minuteness, accuracy, and clearness of arrangement. The following description of the physical signs of emphysema will justify this opinion:—

a. Hypertrophous Variety.

Inspection.—General expansion, giving a globular form to the chest if it exist on both sides; bulging of the infra-clavicular, post-clavicular, mammary, and central sternal sub-regions, or of the anterior surface generally; diminished motion of expansion and elevation; and consequently of retraction and depression; duration of expiratory movement considerably exceeding that of the inspiratory; movement of expansion diminished as compared with that of elevation; costal motions diminished.

Application of the hand.—Vocal and tussive vibration diminished.

Mensuration.—Semicircular measurement of one side, or of the whole chest, increased; increase of bulk under expansion of thorax in inspiration less than natural.

Percussion.—Increase of clearness and of duration of sound; resistance of walls decreased; character of sound more or less tympanic; comparatively deficient diminution of clearness of sound at the close of a full expiration; limits of pulmonary sound scarcely reduced at the close of a full expiration.

Auscultation.—Respiration weak, in very rare cases suppressed in the affected part, exaggerated in those adjoining; rhythm of the respiratory act divided; murmurs harsh, with expiration more or less, sometimes enormously prolonged, and in some cases absent altogether, although inspiratory murmur apparently audible; sibilant, sonorous, mucous, or sub-crepitant rhonchi, from accompanying bronchitis; vocal resonance unaltered or weaker than natural; intensity of transmission of heart's sounds through the affected part diminished.

Situation of surrounding parts.—Heart detrued to-wards the opposite side, if one lung only affected; downwards towards the epigastrium, if both are implicated; mediastinum detrued to the opposite side; either division of the diaphragm pushed downwards with the subjacent abdominal viscera—this in some cases only.

The third part of the work is, as we have remarked, a running commentary on the two divisions which precede it. Here are discussed a variety of points which might have interfered with the simple and strictly practical design of the author, had they been introduced in any other place. For example, we find the following remarks on the terms "dull" and "clear" sound.

The terms *dull* and *clear*, as applied to the sounds elicited by percussion, although obviously incorrect, are retained in this work; because, in the first place, their practical signification is generally understood; and, in the second, it is extremely difficult, if not actually impossible, to substitute correct scientific expressions for them. They are incorrect; because, 1. Dulness and clearness are not phrases opposed to each other, either in the common signification of the words, or in an acoustic sense. 2. Dulness and clearness are not admitted among the properties of sound by natural philosophers; and hence there is this curious contradiction in the works of those writers on physical diagnosis who preface their volumes with an inquiry into the nature of sound, that no such properties as dulness and clearness are ascribed to it, and yet dull and clear sounds are perpetually spoken of in subsequent descriptions. 3. Dull sound is used as synonymous with "little" sound, or "no" sound. Here again is an error; for there is as intense sound produced by percussing the thigh as the infra-clavicular region. It is not in *intensity* that the difference which impresses the ear consists, but in *duration* and in another or other properties; so long as they both last, one is as intense as the other.

In order to substitute correct terms for those in common use, it is plain that we must first understand upon what physical cause depend the conditions practically known as dulness and clearness. The difference is not one of mere *duration*, though, as is shown in many parts of the text, this property bears a fixed relation to the conditions in question. It is difficult to prove that it depends on *note* (dull sounds being so deficient in musical character), but I strongly suspect that such is the fact.

We are tempted to make many more extracts from this excellent work, but our space, unlike Canute's shore, will not admit of encroachment. We must therefore conclude by earnestly recommending Dr. Walshe's work to the attention of our readers. No medical man, at the present day, can pretend to enter the sick chamber, unless he be prepared to apply, in practice, the knowledge derived from a just appreciation of the physical signs of disease, and there is no source to which he can look with more confidence than to "The Physical Diagnosis of Diseases of the Lungs."

pulmonary artery downwards out of its situation and occupied its place, and pressed upon the blood-vessels in their course from the heart to the right lung, and upon the left bronchus.

CASE.—Thomas Timmins, a porter in a furniture warehouse, a short and very muscular man, aged thirty-five, became a patient of Dr. Fletcher, at the Birmingham General Dispensary, Oct. 6, 1842. He complained of a short dry cough, with shortness of breathing, and a sensation of oppression at the upper part of the chest. He states that he had always enjoyed very good health up to about four months since, when he had an accident, and received a very serious injury from the horse running away with a cartload of furniture, which he had the care of; he was thrown off the cart, and the shaft was forced violently against his chest, whilst he hung at the horse's head for some time before he left go his hold, which he did when he found he had no chance of stopping the animal.

He was very ill, and had great pains in the chest for some days after; but these gradually subsided, and all the bad symptoms, except the cough and shortness of breathing, entirely left him, and he returned to his work again, at which he continued up to the present time; but work was become very irksome to him, especially the lifting of heavy weights, for the cough and difficulty of breathing had increased, and the sensation of oppression at the chest had supervened, and these were very much increased by any exertion; pulse 100, full, compressible, and somewhat resilient.

On percussion of the chest, the right side was found generally to be rather duller than the left, but not so dull as to have attracted attention, except upon comparing it with the sound produced by percussion on the other side. The dull space in the region of the heart was rather larger than normal, and extended a little higher than usual in simple dilatation of the heart.

On auscultation, the respiration of the right side was found more feeble than normal; that on the left louder than usual, accompanied with a loud rasping souffle, which extended all over the left side of the chest, but was heard very slightly on the right side.

The impulse of the heart greater than normal; both valvular sounds were heard, but accompanying the first was a loud rasping sound, which was greater in its intensity above the situation of the heart on the left side the sternum, on applying the stethoscope over the intercostal cartilages, and was at its greatest intensity under the first and second costal cartilages and sternoclavicular articulation; and at the left side of the base of the neck its intensity, although much diminished, was very great, and it was heard at the spine and all over the left side of the chest, with a degree of intensity, but still did not mask the sounds of respiration, which were puerile in their character, and underneath the clavicle it had a peculiarity which Dr. Fletcher thinks is not uncommon in aneurisms of the arch of the aorta—namely, the respiration was bronchial, and was interrupted, synchronously with the arterial pulsations. On the right side both this sound and the respiratory sounds were very much diminished; this rasping sound was heard in the neck with greater intensity in the course of the large arteries; there was no normal pulsation to be felt in any part of the chest, above the sternum, or either of the clavicles; he was

BIRMINGHAM PATHOLOGICAL SOCIETY.

December 3, 1842.

JAMES RUSSELL, Esq., in the Chair.

ANEURISM OF THE AORTA.

Dr. Fletcher brought before the society a specimen of aneurism of the ascending aorta and commencement of the arch of the aorta, which pushed the

subject to giddiness and singing in the ears; his bowels acted well.

Bleeding to twelve ounces; aperients and saline medicines were prescribed. He was enjoined to observe perfect rest, take a very mild and sparing diet, and avoid all stimulating drinks.

Oct. 10. Described himself as better; the cough and difficulty of breathing had subsided, and the sensation of oppression was almost removed.

13. Better; goes on with the same plan.

22. The oppression at the chest returned, and all the symptoms increased in consequence of having taken a rather hearty meat supper, was the only reason he could give.

Nov. 10. The reports since the last date have been almost the same as already stated, but it has been quite evident that the patient has been getting thinner, but at this time pain was complained of in the region of the heart, and, on examination, the extent of surface of dullness of the region was found increased, and rubbing sounds accompanied the systolic and diastolic motions of the organ; it was evident that pericarditis had supervened. The sound of the right side was more decidedly dull on percussion, the respiration more feeble, and attended with a subcrepitant rattle. The patient appeared much weaker. The bowels had not acted well. Twelve leeches applied to the region of the heart, and some aperient ordered.

13. The oppression and symptoms of distress were still greater; the pain in the region of the heart, the extent of surface of the dullness on percussion, and the rubbing sounds heard on auscultation, were all increased; the dullness on percussion on the right side was more decided, and the respiration less audible. Leeches and the same plan continued. He became worse; urgent difficulty of breathing came on, and after suffering intensely during the 14th, he died on the morning of the 15th of November.

Post-Mortem Examination, Thirty-six Hours after Death.

The body rather emaciated; perfectly free from decomposition. Head not examined.

Chest.—About six ounces of clear fluid were found in the pericardium, about twelve of the same kind of fluid in the right pleura, and about half the quantity in the left. There was no adhesion in the pleuræ; the left lung was perfectly healthy; the right lung was much affected with oedema in its whole extent.

The pericardium was rough and inflamed in its whole extent; about half its size larger than normal, and proportionably hypertrophied, which, with the dilatation, affected equally all the cavities except the left auricle, which was so pressed upon by the aneurism of the ascending aorta as to be lessened in its cavity, and to have its appendix almost completely obliterated. The right auricle, the right and left ventricles, and the valves situated at the openings of these cavities are, with the exception of the hypertrophy and dilatation already mentioned, in a healthy condition.

About half an inch above the sigmoid valves on the posterior portion of the ascending aorta, is the lower edge of an aperture, which extends to opposite the opening of the arteria innominata, being about an inch and three quarters in length, and in width occupies about the posterior third of the measure of the artery, the two anterior thirds being healthy; this aperture

is thickened at its edges, and communicates with an aneurismal sac, the parietics of which are generally much thinner than the artery, and seem formed of the external coat of the artery only, and which measures about three inches and a half in its perpendicular measure, and about ten inches and a half in circumference. This aneurismal sac projects posteriorly, to the right about a third, and about two-thirds to the left, when it pushes down the pulmonary artery out of its normal situation and completely occupies its place; this sac is marked transversely by the reflected portion of the pericardium in such a situation as to divide the inferior from the two upper thirds, the aneurism projecting in its inferior third into the cavity of the pericardium, and is in this situation so thin, that had the patient survived long, most probably it would have been the seat of rupture. On the distant side of the aneurism the aorta seems perfectly healthy.

The aneurismal sac produces pressure upon several important parts in its neighbourhood, as before said; it pushes down out of its situation the pulmonary artery, which winds round under its left side to its posterior portion, where it divides into its right and left pulmonary arteries, the right of which is considerably pressed upon by the aneurism as it passes behind to the right lung, as are also the pulmonary veins in their course from the right lung to the left auricle. The left auricle is also considerably lessened in its cavity by the pressure of the aneurism, which has operated to such an extent as to have nearly obliterated its appendix. The left pulmonary artery and veins are completely free from pressure, but not so the left bronchus, which is considerably flattened by being pressed between the posterior part of the aneurism and the arch and descending portion of the aorta.

The liver had somewhat of the nutmeg character. Pancreas, spleen, stomach, and intestines healthy.

Dr. Fletcher said that in this preparation there were four points of great interest—two appertaining to the aneurism itself, the other two to the consequences of its pressure upon the adjacent parts.

In the first place it was to Dr. Fletcher particularly interesting, as forming a point of comparison with the case of aneurism of the pulmonary artery which it had been his fortune to have under his care, as it enabled him to establish a point of diagnosis between that disease and the one at present under consideration. It confirms his opinion respecting the incorrectness of that part of the late Dr. Hope's diagnosis of these diseases, where he says (in the third edition of his work on Diseases of the Heart) "an aneurism of the ascending aorta or arch would occasion a pulsation, murmur, or tremor, above the right clavicle or on the right side of the sternum, or above both clavicles." There was in this case no pulsation, murmur, or tremor in that situation, and Dr. F. had seen other cases in which there were not; one he remembered seeing in the wards of la Charité, under the care of M. Bouillaud, in which there was a pointing of an aneurism of the ascending aorta between the cartilages of the second and fourth ribs on the left of the sternum, and no pulsation, murmur, or tremor, above the right clavicle.

In the case now before the society there was a loud

rasping sound, very much in the position of that which is occupied by dilatation or aneurism of the pulmonary artery, and no pulsation, murmur, or tremor above the right clavicle; but the sound did not cease abruptly above the clavicles, and was heard more distinctly in the courses of the large arteries of the neck than at other situations of it, which is exactly the contrary to what is found in dilatation or aneurism of the pulmonary artery, and consequently forms a very good point of diagnosis between these two affections.

With respect to the origin of this aneurism, Dr. Fletcher thought that the history of the case, the man dating his illness from the accident, the healthy state of the arteries generally, except just at the seat of disease, and the thickness that existed around the aperture in the artery where the two inner coats seem to terminate abruptly, and the comparative thinness of the parietes of the aneurism when compared with the thickness of the arterial tissue, tend strongly to indicate that the origin of the disease was a rupture of the internal and middle coats of the aorta. It was difficult, he said, to come to any direct conclusion in this respect from inspection of the parts, but it must be remembered that the disease had existed some time, and that aneurisms form for themselves lining membranes, smooth, and nor unlike the lining membranes of true aneurisms. Dr. Fletcher wished to leave this point for the consideration of the society.

The aneurism had produced pressure upon the left bronchus, so that it was flattened between it and the descending aorta, from which the right bronchus was left quite free, and yet the diminished respiration was on the right side, and the puerile respiration on the left, which is contrary to the general idea about the cause of feebleness of respiration resulting from aneurisms; for it is generally supposed, as stated by Dr. Stokes and others, that this sign results from pressure upon a bronchus, and the cause, which existed in this case, of the feebleness of respiration, is not alluded to by authors, which was evidently the pressure upon the right pulmonary vessels; that, as the veins are more feeble in the structure of their parietes than the artery, operated upon them to a greater extent, and thus produced congestion and œdema of the lung, and consequently the dulness and feebleness of respiration in the side of the chest corresponding.

SHEFFIELD MEDICAL SOCIETY.

Dec. 29, 1842.

Mr. H. JACKSON in the Chair.

RUPTURE OF THE STOMACH.

Mr. Brulbee exhibited a portion of the liver of a female, containing a serous cyst of considerable size. He knew nothing of the previous history of the case.

Mr. Brulbee also exhibited the stomach taken from the same female, which had been ruptured by external violence. It appeared that three men were quarreling in the house of the deceased, and were about proceeding to fight, when she interposed. One of the men knocked her down by a violent blow on the epigastrium, and another kicked her whilst she was down. Mr. Brulbee was sent for to visit her, but she was

dead before he got there. He was told that she died immediately. On examining the body after death, a considerable quantity of food, which had been recently taken, was found in the peritoneal cavity, and a rupture, three inches in extent, was discovered posteriorly in the coats of the stomach, near the cardiac extremity.

HYDROPHOBIA.

Mr. W. Jackson related the particulars of two cases of hydrophobia which have recently occurred in the neighbourhood of Sheffield. The first case was that of a man, aged seventy, of spare habit, who had for many years been a soldier, but had latterly been employed as a laboring man in the village of Maltby. He was bitten over the right eyebrow by a farmer's dog one day during the last week of August. The dog afterwards proved to be rabid. The poor man continued in good health till during the night of October 4, when he began to feel unwell. In order to allay his thirst he procured some water, which he experienced much difficulty in drinking. In the morning, without being aware of the nature of his malady, he came to Sheffield, a distance of twelve miles, for medical advice. The symptoms of hydrophobia gradually developed themselves with increased force, and he died in a state of insensibility during the afternoon of the 7th. He was not so much affected by currents of air or by bright substances as has been observed in many other cases; but he had great difficulty in protruding his tongue, and the effort invariably brought on a paroxysm. He was treated with large doses of hydrocyanic acid, opium, calomel, and mercurial inunction, but the friction caused so much distress that it was discontinued.

The subject of the second case was a boy, aged eight, who was bitten by the same dog three days after the old man. The symptoms of hydrophobia appeared during the night of November 8, when, having awoke feverish, and asked for water, the attempt to drink brought on violent convulsions. On the third day after the attack the child seemed better, and played about with another child, but on the next day it died during a violent paroxysm of convulsions.

There was no complaint of pain in the wound in either case, and no vesicles appeared beneath the tongue. In the first case there was not a stage of recrudescence, but in the second the wound reopened three or four weeks before the appearance of symptoms of hydrophobia. The chief morbid appearances observed after death were injection of the membranes of the brain and spinal chord, as well as of the substance of the brain and chord.

Mr. Jackson subsequently suggested the propriety of subjecting every person who has been bitten by a rabid animal to a long but mild course of mercury. He would keep up a mercurial action for a period of three months, in the hope that the mercury, having thus obtained possession of the system first, would prevent the occurrence of hydrophobia.

[We shall publish Mr. Jackson's interesting cases in full in our next Number.]

PATHOLOGICAL SOCIETY OF DUBLIN.

Nov. 20.

Dr. GRAVES in the Chair.

ANEURISM OF ABDOMINAL AORTA.

Dr. Law detailed a remarkable case of aneurism of the abdominal aorta, and exhibited a drawing and preparations of the parts engaged. The patient was a gentleman, aged about thirty-eight, of slight figure, and who generally enjoyed good health. His habits had been active, he was fond of hunting, and had sometimes been thrown from his horse, but without receiving any serious injury. In November last he applied to Dr. Law, complaining of pain in the back, from which he had suffered for a considerable time past, and which he could not ascribe to any particular cause. About six weeks before his application to Dr. L. the pain had suddenly become much more severe, and he recollected distinctly that this aggravation occurred on his hearing some intelligence that distressed him very much. From the medical treatment to which he had been subjected he had experienced but little relief, and that merely temporary. Dr. Law prescribed for him an antispasmodic draught, and it had the effect of immediately relieving the pain. There were, however, some circumstances in the case which induced Dr. Law to desire that the patient should remain in bed on the following day, when he made an examination with the stethoscope. On applying the instrument to the epigastrium, a *bruit de souffle*, very loud and distinct, was heard; it was also audible posteriorly on both sides of the spine. Careful examination, repeated on a second and third day, detected the same symptoms, from which, together with the character of the pain, Dr. Law made his diagnosis that the case was one of aortic aneurism, and of some duration, an opinion in which Dr. Stokes, who was called into consultation, coincided. In compliance with the anxious desire of the patient's family, there was subsequently added to the consultation another practitioner, who doubted whether the diagnosis already made was correct, because he had himself (as he mentioned) met with the same symptoms in a patient that he was attending some months previously, and whose case proved, by a complete recovery, that it was not one of aneurismal disease, which it was at first pronounced to be. Notwithstanding this difference of opinion, the case continued under Dr. Law's care, and the event confirmed the accuracy of his and Dr. Stokes' prognosis. The general health declined, the appetite failed, the patient gradually became weak, emaciated, and exceedingly nervous; there was strong pulsation in the epigastrium, but no tumor, nor was the action of the heart much increased; the pain in the back was of two different forms—one was a continual sense of weight or uneasiness, which never intermitted; the other was acute, sharp, darting pain, felt on each side of the spine, which was periodical, recurring generally at midnight, and which, for a considerable time, always yielded to the medicine directed—viz, camphor mixture, æther, and Batly's sedative liquor. As the case proceeded towards its termination the emaciation increased, the pains became more severe, and extended into the lower extremities, particularly on the left side. In this manner six months passed

away, when Dr. Law was suddenly sent for in the evening; he found the patient in a state of great distress and agitation, with all his symptoms increased; he complained of most agonising pains, extending from the seventh rib on the left side down to the margin of the ilium; a heaving motion was perceptible in the side; the abdomen was tympanitic, and the *bruit de souffle* could no longer be heard; the pulse was weak and faltering, and there was great depression, which continued to increase till death occurred, which took place on the next day but one.

The body was examined twenty-six hours after death. The parietes of the left ventricle were somewhat hypertrophied and softened; in other respects the contents of the thorax appeared healthy. In the abdomen the aorta was observed passing into an aneurismal tumour, near the cœliac axis. The tumor did not project much beyond the level of the spine, it extended more to the right side, and was about three inches in diameter. The aorta having been raised from the spine, there was observed in its posterior wall, opposite to the origin of the cœliac artery, a circular aperture, with smooth edges and about an inch in diameter, opening into an irregular-shaped cavity, corresponding to the bodies of the two last dorsal and two first lumbar vertebræ, whose substance had been absorbed; the intervertebral substance was not eroded; the cavity itself was filled with lamellated fibrinous matter, dark, brown colored, and firm in consistence. Behind the peritoneum, on the left side of the spine, was an immense clot of blood, extending from the diaphragm down to Poupart's ligament. The descending colon was firmly adherent posteriorly to this mass. The effused blood had so infiltrated the adjoining parts that it was very difficult to raise the coagulum from its situation; a section was made of the mass, which did not present any lamellated structure; the cellular matter in which it was entangled could be traced through it in whitish lines, and the fibres of the psoas, from which numerous nerves were seen to issue, were spread upon its surface; the left kidney was completely imbedded in it. The tumor lying on the spine where the bodies of the vertebræ had been destroyed was the original aortic aneurism, and the infiltration of blood into the neighbouring parts, and the large coagulum, evidently proceeded from a recent hæmorrhage, the occurrence of which was marked by that sudden aggravation of symptoms which had occurred about two days before the death of the patient.

Dr. Law considered this case of great value and interest, from the information which it conveyed as to a disease so obscure, and in which accurate diagnosis is so difficult. He had observed that no symptom was more pathognomonic than the pain, when viewed in connection with the other symptoms, and it was the peculiar character of this symptom which led him to diagnose aortic aneurism in the present case. Epigastric pulsation and *bruit de souffle* might occur in cases where there was no organic disease. During the last session he had met with a case of aneurism of the thoracic aorta, in which, as well as in this, the opening occurred in the posterior wall of the artery, and the pain endured by the patient was, also, of two kinds; one an aching, boring pain, which was constant; the other an occasional nipping pain, darting

sometimes along the ribs, sometimes in other directions. There was also a sense of stuffing, almost amounting to suffocation, caused by the aneurismal tumor encroaching on the organ of respiration. A case of abdominal aneurism had been detailed by Dr. Thomas Beatty (in the Dublin Hospital Reports), which was among the earliest efforts towards the accurate investigation of this formidable affection.

December 11.

CANCER OF THE UTERUS IN ITS INCIPIENT STAGE.

Dr. Montgomery said, that by the kindness of Dr. Greene he was enabled to lay before the society a most interesting specimen of disease, and which was peculiarly adapted to illustrate a subject that for a long time had engaged his attention. The patient in this case was a woman, aged forty-five, who died of a carcinomatous affection of the rectum. The disease commenced eighteen months ago. The first symptoms observed were constipation, succeeded by great irritability of stomach, and afterwards severe and lancinating pains in the sacral and lumbar regions, extending to the hip-joints, and down the thighs. The pains were exacerbated when the bowels were moved; the constipation ceased, and then came on an uncontrollable purging, with foetid and bloody dejections, which lasted for some time, and then alternated with constipation. On the 2nd of December she was admitted into the Whitworth Hospital, and was then suffering unceasing pain in the back; it extended down the left thigh, which was œdematous; the hypogastric veins were enlarged; the abdominal muscles rigid; the countenance sallow and sunken; the body in a state of emaciation. There was severe pain in the pyloric region, and the stomach rejected both food and medicines. In the examination, after death, no disease could be detected in the stomach; the rectum was extensively diseased; but what he wished to direct the attention of the meeting to, was the condition of the uterus, which was covered with false membrane, and agglutinated to the intestines. The patient had died of a carcinoma of the rectum, and the same disease was commencing in the uterus, but as yet the substance of the uterus was unaffected, except at the cervix, and there it exhibited, in a very well marked manner, the symptoms of a period of cancer uteri, which it was very important to recognise, not only as a pathological fact, but as one connected with therapeutics, and which he had been the first to describe. The propositions he wished to inculcate were these:—

1. That there is a stage of cancer of the uterus, in which the disease is confined to the muciferous glands of the cervix uteri—a stage earlier than that which authors have described as the first stage.
2. That this can be recognised by examination during life.
3. That the disease is then curable, but, if neglected, will pass on into the incurable stage.

The symptoms of this earliest stage of cancer of the uterus are nearly those of the subsequent (the *first* of authors), or even of the ulcerative; for instance, pain; but on examination, the disease will be found affecting only the os uteri and the cervix; these will be swelled and turgid, and projecting granules will be felt under the mucous membrane; the os uteri and cervix will be of a deep crimson color, and the characteristic points

or granules often of a dark blue, and prominent; there will be no consolidation of the organ with surrounding parts, and its functions, as the catamenia, continue unimpaired. It might be objected, that such a state would not be carcinomatous, but the present case sufficiently proved it to be real cancer. The patient had died of cancer in one organ, and it was extending to another, where it exhibited all the characters he had described, of the period in which cancer of the uterus is as yet curable, and can be recognised. In the specimen, the society would observe the fulness and firmness of the os and cervix uteri, and the granules which felt like shot or gravel under the mucous membrane. Dr. Montgomery said he dwelt on the importance of this matter, because he had several instances of cures effected when the cancer was detected in this early period. One of these had now remained seven years free from the disease; another five years; a third, two years and a half, &c. Of the curative means, that was not the place to speak; but what his experience enabled him to communicate he intended to lay before the public.

UNION OF THE MUSCLE DIVIDED FOR STRABISMUS.

Under this head in our last number we gave an account of an anatomical preparation exhibited at the Academy of Medicine, Paris, by M. Lucien Boyer, in which it was shown that the divided rectus muscle contracted new tendinous adhesions with the globe of the eye. It was also stated that a preparation made by Mr. Babington, of London, furnished the same results.

In the history of this interesting fact, it is justice to state that Mr. Bennett Lucas demonstrated the same in the *living* human eye, as long ago as August, 1840, as will appear from the following extract from his work on Strabismus:—

"On the 4th of August, 1840, fifty-three days having been allowed to intervene since the inner rectus muscle of the right eye was divided, the organ was still turned slightly upwards and inwards; and, as little hope could be entertained of this deformity being remedied by counteracting muscular power, I operated a second time, and separated the muscle from its new adhesion.

As the most skillful operator may have occasion to look for the inner rectus muscle under the circumstance just stated, and as some peculiarities present themselves in operating a second time on the same muscle, I shall offer no apology for detailing the manner in which I performed the operation on Mr. Mills.

On exposing the eye, the cicatrix of the conjunctiva was plainly discernible, notwithstanding its being colorless, and was adherent to the subjacent sclerotic coat; I inserted the small sharp-pointed hook about a line distant from its inner side, and here the conjunctiva was movable over the sclerótica, but not so much so as in its natural condition; with the sharp-pointed scissors I made the requisite section of the conjunctiva, and having removed the blood with a sponge, the inner surface of the sclerotic coat immediately presented itself, in consequence of the cellular tissue and the subconjunctival and submuscular fasciæ not being regenerated since the first operation. The semicircular mark of the original insertion of the muscle was plainly discernible, and taking the blunt hook in my right hand, with the greatest facility I passed it beneath the new insertion of the muscle, which was about a line and a half behind its original attachment. I then gently drew forwards the muscle, and divided it with a scissors as before. The eye immediately took the desired position, and at this moment, September 1st, it would be impossible to detect the slightest trace of strabismus in either eye."

RETROSPECT OF THE MEDICAL SCIENCES.

STATISTICS OF PNEUMONIA.

The following is an analysis of the notes of 101 cases of primary pneumonia occurring under Dr. Hughes' observation. The right lung was alone diseased in 52 cases, the left in 29, both in 19 cases, and in one the side affected was not mentioned. The parts diseased were as follow:—the base alone of the right lung was inflamed in 36 cases, of the left lung in 16, and of both lungs in 12. The whole of the right lung was inflamed in 4 cases, of the left in 6, and of both in 2. The posterior part alone of the right lung was inflamed in 3 cases, of the left lung in 4, and of both in 1. The apex alone of the right lung was affected in 4 cases, of the left in 1. The centre alone of the right lung was inflamed in 2 cases, of the left in 1 instance. The parts diseased were not mentioned in 2 cases, and in 9 instances various parts in one or both lungs were involved. When both lungs have been inflamed, it has occurred in the bases of both in 12 cases, generally throughout both in 2 cases, in the posterior part of both in 1 case, in all of one and the apex of the other in 2 cases, in the apex of one and the centre of the other in 1 case, and in the posterior part of one and the base of the other in 1 case. In these statements it is not intended to imply that the disease was in any way strictly confined to the part mentioned, and that it did not encroach on those adjoining; but simply, that in the notes of the cases this is mentioned as the diseased part indicated by the physical signs.

Of the 101 cases, 76 occurred in males and only 25 in females. Primary pneumonia in adult life appears to be the most frequent between the ages of twenty and thirty, as it occurred below the age of twenty in 24 cases, above twenty and below thirty in 38 cases, above thirty and below forty in 19 cases, above forty and below fifty in 8, and above fifty in 12. It was met with in an acute or subacute form in 92 cases, in a chronic form in 8, and with acute gangrenous abscess in 1.

Whenever any considerable portion of the pulmonary surface has been inflamed, pleurisy has coexisted; but when the disease occurs in the lobular form, and does not reach the surface of the organ, the pleura, on the contrary, is generally unaffected. The other complications have been bronchitis in 22 instances, phthisis in 5, influenza in 4, continued fever in 3, pericarditis in 3, and erysipelas, disease of the aorta, delirium tremens, epilepsy, hæmaturia, aneurism, empyema, rheumatism, renal disease, simple catarrh, peritussis, and fracture, of each one. There were 52 cases uncomplicated, or complicated with pleurisy only.

Of the whole number, including every case, whether submitted to active, to little, or, excepting food and stimulants, to no treatment, there were cured 70, died 24, were relieved or not reported 7. In the fatal cases the following circumstances probably contributed in some measure to the result; the very advanced state of the malady in 4 cases, both lungs being generally affected in 2, both being partly affected in 1, complication of phthisis in 5, complications of empyema, aneurism, hæmaturia, epilepsy, delirium tremens, pericarditis, bronchitis, and emphysema, of each one. Nothing, except the primary disease, to

account for the result was observed or noticed in 5.

Of the cases that were considered fit subjects for, and were consequently submitted to, the treatment by venesection, and calomel and opium combined with antimony, followed by local bleeding and blisters when necessary, there were 47; of these 41 recovered and 6 died; of these 6, 2 were laboring under phthisis and 1 under delirium tremens. Of the cases in which general bleeding was not admissible, or was not considered necessary, there were 37; of whom recovered 20, died 13; the result in 4 cases is not mentioned.

Of the cases in which general or local bleeding and blisters, with antimony either alone or with salines, but without mercury, were had recourse to, there that were 9; of these 7 recovered and 2 died; of the 2 died, 1 suffered also from pericarditis and the other from aneurism. There were 2 other cases, in which antimony alone proved of no service, but in which a cure was effected when calomel and opium were combined with it.

The cases in which both lungs have been diseased were 19, of whom 12 recovered and 7 died; where the whole of one lung was diseased, of which there were 10 instances, 4 on the right side and 6 on the left, 5 recovered, 2 died, and in 3 the result is not mentioned. Of the 5 cases in which the apex was the part alone affected, 4 recovered and 1 died. The respective ages of these 5 patients were 31, 32, 35, 45, and 50—thus to a certain extent confirming Louis' opinion, that pneumonia of the apex generally occurs at a more advanced age than the average of those affected with this complaint.—*Guy's Hospital Reports*, Oct. 1842.

CAULIFLOWER EXCRESCENCE OF THE UTERUS.

A case of the cauliflower excrescence affecting the uterus having occurred in the Dublin Lying-in Hospital, the tumor was removed by ligature, and examined anatomically by Dr. Anderson, of Glasgow. It was of a very pale reddish yellow color, and bled freely when pressed on. The pieces examined by Dr. Anderson were carefully dissected under water, and a lens. On making a section of a portion of the tumor with a fine knife, its structure was seen to be much more complex than it seemed to be when examined externally; it was finely laminated, appearing in section as if formed of somewhat parallel plates of a whitish matter, separated from one another by reddish lines, which proved to be the layers of a membrane beautifully vascular, and very thin. The layers of the whitish matter seemed folded round its laminae, so that the external surface of the mass was formed by the foldings of the thicker substance, which then dipped into the tumor. The general investing vascular membrane described by Sir C. M. Clarke could not be discovered.

In a morsel of the membrane highly magnified, Dr. Anderson detected a fine fibrous structure of great delicacy, absolutely swarming with blood corpuscles and cells, to the presence of which great part of its apparent thickness seemed due. The course and distribution of the capillary vessels could not be distinguished with sufficient exactness. Besides the cor-

puscles which retained their form, there were others apparently undergoing various changes, exhibiting every variety of shape, and mixed with nucleated cells of different aspects. Of the latter, some were clear, with a single nucleus; others exactly like Dr. Barry's figures of the ovum in certain stages, being full of young cells; there were caudate corpuscles, like those Miller saw in cancer, and other bodies of various shapes. In the white laminae, examined in the same way, no fibrous basis existed; the whole consisted of an uniform mass of cells, precisely alike, of an irregular form, from mutual compression, and full of a granular matter. On washing away the white matter, the membrane remained entire. It did not consist of parallel laminae, but was beautifully flocculent, branching out very complexly from a thicker central portion or stalk.

The cauliflower excrescence, then, has for its basis a membrane of extreme tenacity, ramifying most complexly, amply supplied with blood, and possessing the power of forming from that blood a whitish cell substance, which is deposited in a layer about it. Hence each portion of the membrane forms, after maceration, a kind of lobule or flat villus, but in the recent state these adhere closely together, so as to give the whole tumor a nodulated aspect.

Dr. Anderson conceives that the white substance, which constitutes the bulk of the structure, is formed by the membrane as a matrix, and from the blood with which that membrane is supplied, by a change in the corpuscles. He had not an opportunity of examining the watery discharge so characteristic of this disease, but he believes it will be found to flow from the white substance directly, probably in consequence of the bursting of the external layer of cells, they being as quickly reproduced within, that thus a constant drain from the blood is going on, made more exhausting by occasional actual hemorrhage, when the tumor happens to be congested, or accidentally injured.

He differs in opinion with Sir C. M. Clarke, who supposes the structure of the tumor to be analogous to that of nœvus or the placenta. The peculiar white substance just described constitutes an essential difference: Dr. Anderson calls it lardaceous or cerebriform; he says, in short, that it has all the characters of the softer cancer, and concludes it to be a peculiar form of the encephaloid disease.

The tumor from which Dr. Anderson obtained his specimen was not wholly the cauliflower excrescence. On making a section of the portion removed by ligature, it was seen not to be wholly formed of the peculiar tissue previously described, but to have a central basis of a firm fibrous character, from the external surface of which sprung the laminated folds of the vascular membrane. This fibrous mass was red, and very vascular. This growth Dr. Anderson believes to have been a polypus, or an hypertrophy from the neck of the uterus, from which the proper cauliflower excrescence sprung, as it usually does, from the uterus itself.—*Lond. and Edin. Med. Journ.*, Oct., 1842.

POISONING BY IODINE AND THE IODURET OF POTASSIUM.

M. Orfila has conducted a series of experiments, with the view to discover the traces or indications of

iodine or the ioduret of potassium in the tissues of the body. Wöhler, Cantu, Bennerscheidt, and O'Shaughnessy had previously found traces of iodine in the urine, perspiration, and saliva of men and animals, to whom it had been administered. Dr. Kramer, in a yet unpublished work, states that he has found, after having taken the ioduret of potassium, that the urine passed forty-eight hours after the last dose contained a considerable proportion of iodine. Seventy-two hours afterwards, there was still a notable quantity in the fluid, and traces were perceived even after the lapse of ninety-six hours.

From the experiments of Orfila, it appears that when 4 scruples of iodine dissolved in 60 of alcohol of 36°, are given to middle-sized dogs, and the œsophagus carefully tied, the animals exhibit all the appearances of extreme intoxication, and die in an hour or two in a state of great prostration. The examination of the bodies made the day after, showed the stomach of a yellow color, hardened, and tanned, as it were. By boiling the liver, spleen, and kidneys for two hours with distilled water and a scruple of potass, a deep yellow-colored or brown liquid is obtained, which, filtered and treated with nitric acid, yields iodine. The same result will attend the adoption of a similar process with the urine. A solution of iodine in spirit and water will equally destroy life, and the chemical examination of the tissues after death will yield similar results.

The process adopted by Orfila to discover iodine when mixed with articles of food, vomited matters, matters found in the alimentary canal after death, &c., is as follows:—The liquids are filtered in the first instance, when if there is any iodine in the solid state, it remains in the filter, and is easily recognised. If it be in a state of solution, it may have been already changed into the ioduretted acids, more especially the hydriodic acid, in which case starch alone will not be sufficient to discover it. After having shaken the liquids with a solution of starch, a sufficient quantity of strong nitric acid is to be added gradually, by which the hydriodic acid will be decomposed, and a blue or violet-colored precipitate of the ioduret of starch will be formed, which will soon collect together, if sufficient nitric acid has been used; it must be washed several times to free it from the colored liquids in which it has been formed, and from any excess of nitric acid which may be present. In order to be sure that it contains iodine, a certain quantity must be diluted in water, after having been allowed to drain on a filter, and then heated to 175° or 190° Fah. in a tube; if it contains iodine the liquid will become colorless, and resume its blue or violet hue as it cools; if it should not do so, it will be sufficient to add a few drops of a solution of potass to the cooled liquid to restore its color. Another portion of the precipitate may be shaken in a glass tube with water, a little sulphuret of carbon, and strong nitric acid; the sulphuret of carbon will be seen soon afterwards at the bottom of the vessel of a rose or violet color.

If these characters are not sufficiently marked, another portion of the suspected liquid should be heated in a glass retort, having a tube adapted to it, terminating in a receiver surrounded with ice and salt, and containing a solution of starch; after some minutes boiling, violet colored vapors will be seen in

the retort, and the starch will assume a blue color, which it might not have done if the receiver had not been cooled; sometimes even the iodine will crystallise on some part of the retort. If the quantity of iodine contained in the suspected liquid is too little to produce such results, the boiling must be suspended after twenty minutes, and continued after having added some scruples of liquid chlorine to the fluid in the retort. However small the quantity of iodine, the starch will then assume a violet color.

To discover the presence of iodine in milk, the latter must first be coagulated by nitric acid, the liquid filtered to separate the curds, and then the process just described may be proceeded with.

Orfila objects to the process advised by Devergie and O'Shaughnessy to discover iodine when mingled with articles of food, &c., because it is too complicated and less sensitive than the one he recommends; it is also insufficient, because it does not give the proof of the existence of the iodine—who, in fact, he says, after having treated the suspected matters with numerous reagents, can be contented with producing a simple violet color, and not seek to prove that this violet colored precipitate is really the ioduret of starch?

If the chemist would seek for the iodine in the viscera into which it has been carried by absorption, or in the tissues of the alimentary canal, he must boil them for about two hours in distilled water with a scruple of potass purified with alcohol; the filtered colored solution, treated with a sufficient quantity of strong nitric acid, will behave with starch as has been already stated.

To detect the ioduret of potassium mixed with food, blood, &c., these matters must be boiled for an hour or two with distilled water, and filtered. The liquids are then to be divided into two parts, one of which is to be treated with nitric acid and starch, and the other heated with liquid chlorine in a retort, according to the directions already given. The solid matters exhausted by the boiling water are to be acted on in the same manner, if the iodine has not been discovered in the filtered liquids.—*Journal de Chimie Médicale*, September, 1842.

LIQUOR HYDRIODATIS ARSENICI ET HYDRARGYRI.

In a recent communication by Mr. Donovan, published in the "Dublin Journal of Medical Science" for November, reference is made to the chemical objections urged by MM. Soubeiran and Kane against the solution of the hydriodate of arsenic and mercury introduced by Mr. Donovan. It appears that the French translator of Mr. Donovan's previous communication unadvisedly used the phrase "a little alcohol" instead of the certain quantity ordered, and trivial as the error may seem, it may cause a failure; if too little be used, the mass, when it arrives at a pale red color, will not have suffered sufficient trituration to ensure union of the elements, the consequence being that some portion of the arsenic remains undissolved. The elements should be presented to each other in a state of the most minute division; iodine cannot be powdered, it must therefore be dissolved, and as it is little soluble in water, alcohol ought to be used. This method brings the particles of all the elements into the contact necessary for the exertion of chemical affinity. But the alcohol must be in such quantity as will not too quickly evaporate and leave the mass

dry before the elements have united perfectly. Any abridgment of the time during which the trituration ought to be continued, tends to leave undissolved arsenic; and if the alcohol be diminished, so also is the time of trituration. M. Soubeiran recommends, to supply the place of Mr. Donovan's solution, the iodide of arsenic and biniodide of mercury to be dissolved in boiling water; he finds that they dissolve perfectly. Dr. Kane, in his "Elements of Chemistry," page 763, observing upon this liquor, affirms that its component parts are not in a state of chemical combination; for the iodide of arsenic being decomposed by the water, the iodide of mercury is dissolved by the hydriodic acid formed, whilst arsenious acid exists free in the solution. This opinion is controverted by the researches of Plisson.

One drachm measure of the liquor of hydriodate of arsenic and mercury—consists of water one drachm, arsenious acid one eighth of a grain, peroxide of mercury a quarter of a grain, and iodine in the state of hydriodic acid about three quarters of a grain.

POISONING BY QUICK LIME.

M. Théophile Dutot, of Maniquerville, having found a white powder spread over the lands where he pastured his sheep, sent a portion of it to M. Marchand, the pharmacien at the Civil Hospital, at Fécamp, for analysis, as he considered it was the cause of a disease that affected his sheep, and which had already caused the death of several. M. Marchand ascertained that the powder in question was quick lime, the oxide of calcium. The symptoms it produced were, first, constipation, with slight pain on pressure in the abdomen, especially on the right side, loss of appetite, emaciation, and general paleness of the mucous membrane. The fatal termination was preceded by severe mucous diarrhœa, and exceeding increase of the pain in the abdomen, so that the animal could not bear to be touched. The examination of one of the animals after death did not enable M. Delamarre, the veterinary surgeon, to discover any traces of inflammation.—*Ibid*, September, 1842.

INVERSION OF THE UTERUS.

Dr. Humphreys Storer was in attendance upon a woman in labor, parturition taking place naturally. The cord was not touched, except to divide it, and remove the child. On putting his hand under the clothes to take away, as he supposed, the placenta, he found that he had hold of the uterus with the placenta attached. He removed the placenta and then returned the uterus without the slightest difficulty. There was a little hemorrhage when the after-birth was detached, but none after the prolapsus had been reduced. The patient was very much prostrated, and for an hour appeared to be dying; she, however, revived, and ultimately did well.

The placenta was very large, and Dr. Storer states that, had he made any attempt to return it, in accordance with the advice of Burns, Dewees, and Gooch, he would have met with difficulty, from its mere bulk. This case proves that inversion may take place without the interference of the practitioner; no traction was made on the cord, which was of the usual length, and not encircling the child.—*New England Journal of Medicine and Surgery*, July, 1842.

THE PROGRESS OF MEDICAL SCIENCE.

—“*Omnia novit
Græculus esuriens*”—

JUVENAL.

We extract the following *morceau* from the advertisement of the last week's "Lancet." Does the worthy editor propose to enter the field against the hygeist, or is this a last effort to prop up a falling concern? Such a piece of literary quackery never before smote our astonished eyes.

"12. Mr. Atkinson on prussic acid vapor in staphylococci, with accounts of new discoveries in the treatment of *scurvy, diabetes, cancer, prurigo, tumors, club-foot, hydrocele, yellow fever, ague, epilepsy, and diseases of the glands, the skin, and the bladder.*"

Here is a bill of discoveries with a vengeance!

M. LOUIS.

M. Louis has been promoted to the rank of officer of the Legion of Honor.

OBITUARIES.

DEATH OF MR. K. T. KEMP, LECTURER ON PRACTICAL CHEMISTRY IN THE UNIVERSITY OF EDINBURGH.

It is with feelings of the deepest sorrow that we announce the departure of our esteemed friend. Mr. Kemp died on the 28th November, aged thirty-seven, after a confinement of fourteen days, during which time he suffered much from severe attacks of angina pectoris, and a sense of impending death,—symptoms occasioned by an aneurism of the arch of the aorta, under which, for the last six years, he knew himself to be laboring. Upon examination after death, the aneurismal tumor, which was of the size of a duck's egg, was found behind the upper part of the sternum, and pressing on the trachea. From his earliest youth, Mr. Kemp showed a strong propensity to the cultivation of science, and his naturally ardent mind gave a character of enthusiasm to every pursuit in which he engaged, and carried him successfully through the difficulties—and they were not few—which beset his path at the outset of his career, and which, alas, were no sooner overcome, and the way to eminence and distinction opened up to him, than it became evident to himself and his friends that he was doomed never to enjoy the fruits of his labor. During the earlier part of his course as a teacher of chemistry, he devoted his attention chiefly to voltaic electricity, and produced many interesting and valuable modifications of galvanic apparatus; and to him the world is indebted for the advantages derived from the amalgamising of the zinc plates—an improvement entirely his own, and one which is now almost universally adopted in the construction of galvanic batteries. He afterwards turned his attention to the consideration of the gases, and his success in this department of science is well known. At one period he experimented extensively upon combustion, and carried out to the fullest extent the views which were

advanced upon that subject by Sir H. Davy. But it is needless to particularise; in every department of chemical science he was one of the foremost and most successful experimenters, and all his experiments and observations bore the stamp of a bold and original mind. Of late years his energies were damped by the insidious advances of the disease which terminated his existence at a period of life when it might have been hoped that he was but entering upon a bright career of usefulness; and although he bore himself with firmness and resignation, yet the consciousness that the great destroyer had marked him out for his early prey, produced an apathy of mind and a dislike to appearing before the public; and ultimately he enjoyed no society save that of his more intimate friends and relations. To this cause it may in a great measure be attributed that he gave so little publicity to his observations and opinions; but the public have derived the benefit, although the credit may not be given where it is justly due. He was warm and generous in his attachments, and in his disposition kindly and cheerful; he was beloved by a large circle of acquaintances, and by his death his family has lost a dutiful son and an affectionate brother. Mr. Kemp commenced his public lectures in 1829, but long before that time he gave private lessons in chemistry, and was zealously engaged in chemical investigations. —*Edinburgh Monthly Journal*, No. 25.

MR. WALKER, OF ST. GEORGE'S HOSPITAL.

We have this week to announce to our readers the premature death of Mr. Robert Benjamin Walker, one of the surgeons to St. George's Hospital. He died on Monday evening, at his residence, 27, Curzon-street, May-fair, after a severe illness of only four days' duration. We hope to be able to give some particulars of Mr. Walker's professional career, and of the disease which has deprived the profession and the public of his valuable services, in an early number of our Journal.

PROMOTIONS AND APPOINTMENTS.

NAVAL.

Surgeons—C. R. Brien, to the Thunderbolt; Morris Pritchett, M.D., to the Spiteful.

Assistant-surgeons—J. J. W. Roberts, to the Naval Hospital, Haslar; John Henderson, to the Caledonia; M. J. Dill, to the Spiteful; John Thomson, to the Gleaner; G. H. Ryan, to the St. Vincent, for service at Haslar Hospital.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, December 30, 1842.

J. S. Mackintosh, G. Geere, T. Evans, T. S. Blackwell, H. Hutson, W. A. Rackham, C. Evans, W. S. Britton, H. Cooper, R. Jones, J. Mullins, N. Buckley.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET,
CAVENDISH SQUARE, LONDON.

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REMARKS ON CATARACT,

FROM THE

CLINIQUE OF M. ROUX, PARIS.

By MM. MAUNOURY AND THORE.

There are few diseases in the whole range of surgery to which the statistical method is more readily applicable than to cataract. The symptoms of this disease are few and easily ascertained, its diagnosis generally not difficult, and the operations adopted for its removal may be reduced to the two principal methods of depression and extraction. Hence we have been induced to apply the numerical method to the study of this disease, and to analyse twenty-nine cases, which were carefully observed in all their details, during the year 1841, in the wards of Professor Roux. By grouping together the points of these cases, and comparing them with others, we may hope to arrive at some valuable conclusions.

I. CAUSES.—Little is known respecting the proximate cause of this disease; of 67 persons laboring under it we find—

Age.	1841.	Age.	1840.
To 10½ years .	2	From 15 to 20	1
From 21 to 30	2	31 to 40	2
31 to 40	2	41 to 50	3
41 to 50	3	51 to 60	6
51 to 60	6	61 to 70	9
61 to 70	9	71 to 80	5
71 to 80	5	81 to 90	1
81 to 90	1		
Total . .	29	Total . .	38

This table shows that cataract is of rare occurrence before the age of manhood, but begins to show itself frequently between the ages of 50 and 70. The few number of cases which occur after this latter period is explained by the small number of individuals who attain a very advanced age. Cataract, in the child, is generally a congenital disease; but in the case of the child 10 years old it was developed at the age of 8 years, without any appreciable cause, and occurred on one side only. In two persons, one of 21, the other of 22 years, it was membranous, and arose from external injury to the eye. It is only from 38 to 40 that it begins to occur frequently and appear spontaneously, the exceptions to this rule being rare.

Sex.—Both sexes seem equally subject, according to writers, but men appear to be more frequently attacked than women. M. Fabini reckons, in 500 cases, 268 males and 232 females; Dupuytren, in 207 cases, gives 132 males, 72 females; the 38 cases which occurred in the Hôtel-Dieu, in 1840, were equally divided amongst men and women; but in 1841 there were only 7 females amongst the 29 patients.

A correction, however, must be made for the cases admitted under M. Roux; for the beds allotted to females are much fewer in number than those set apart for males.

Profession.—Notwithstanding the opinion of M. Maunoir, it is generally admitted that the action of strong light on the eyes may promote the formation of cataract; and the same remark applies to any profession which requires excessive exercise of the visual organ. Of 22 male patients, three were placed under the circumstances alluded to; one being a farrier, another employed in enamelling, and a third in blowing a furnace; three were agriculturists. Of seven women, three were employed in the cultivation of the vine, one was a sempstress, and another a worker in lace.

The following facts illustrate the influence of color of the iris on the tendency to cataract. This color was noted down in 28 cases; in 10 it was fallow; in 10 brown; in 8 grey; a brownish color, varying from light fallow to the deepest brown, is the most common one observed in the eyes of people laboring under cataract, as it is in the eyes of people in general; and for the same cause we have a brown or orange-colored iris in patients affected with amaurosis.

The influence of hereditary predisposition has been well proved. M. Roux operated on three brothers of the same family; the father had labored under the same disease and a fourth child was afterwards attacked.

Amongst the exciting causes of cataract we must mention, as the chief, wounds or contusions of the globe of the eye. A man, 70 years of age, received a violent blow while exploding a mine. He became blind on the spot; three months afterwards vision was partially restored, but it gradually got weak again, and a cataract formed. One of the young persons already mentioned had received a wound from an arrow in the eye; another patient had struck himself violently against a tree. Cataract may be produced by any severe injury or violence inflicted in the neighbourhood of the eye. Thus, a soldier received a violent blow on the side of the head from a loaf of bread; the eye was not hurt; but two or three days afterwards vision of that side became weak, and was lost. In this, as in the former case, the cataract affected the crystalline lens; in the two others it was membranous.

II. PROGRESS.—Does cataract occur more frequently on one side than on the other? In 17 cases it occurred 11 times on the left side and 6 times on the right; and if we reject three cases of traumatic cataract we shall have 5 on the right and 9 on the left side; however, a more careful sifting of the cases shows that there is very little predominance in favor of the left side.

As to the time which elapses between the first

diminution of vision and its complete loss, accurate information could be obtained for 30 eyes only. In two cases of traumatic cataract the opacity of the lens occurred almost immediately after the accident. Complete blindness occurred after the expiration of

10 months in	2 cases.
1 year	10
1½	3
2	4
2½	5
3	2
4	1
5	1
Total	28

Thus, in the majority of cases the lens becomes opaque within the period of a year, and as a general rule it may be laid down that blindness takes place within one or two years.

III. SYMPTOMS.—Vision gradually diminishes and is finally lost; but this never occurs as completely as in cases of amaurosis. When the edges of the lens are not quite opaque the patient seeks an obscure situation, and as the pupil dilates, some little vision is permitted. Four patients could distinguish a few objects in the evening and morning, though they were quite blind during the day. Four could distinguish the shadow of the finger, when placed before the eyes; in twenty cases the patients were merely able to distinguish very strong light from darkness.

State of the Eyes.—In three cases the senile circle was strongly marked; in one the pupil was greatly dilated, and but little contractile; after operation, no amaurosis was found to exist; in two cases the pupil was strongly contracted; in the majority (26) it was neither contracted nor dilated. As the operation generally performed by M. Roux was extraction, it was easy to ascertain the state of the lens, and compare it with its condition as seen behind the iris. Two states of the lens were chiefly noticed; in one it presented a whitish grey opacity, divided in all directions by very white striæ; in the other the opacity was of a deep uniform grey, without striæ of any kind. In the first series, the lens, when extracted, was of a brownish yellow color, dry, hard, and not enveloped in any gelatinous fluid, except in cases where it was whiter, and then the hard nucleus was surrounded by a thin layer of this fluid. In the second series the lens was of a tawny yellow color; less firm towards the centre, very soft, and enveloped in a viscid, semi-fluid substance. In a variety of the second series it was reduced to a matter like paste. These results confirm the observations which have been made by other writers; they show that the striated appearance indicates that the lens is hard and consistent. Three cases deserve a separate notice from their peculiarity. In the case of a child, 10 years old, the surface of the lens was of an uniform grey color, but this surface was cut by two brilliant white striæ, in the form of a T. In another case there was a small, dull, white point, not larger than a pin's head, in the middle of the lens, which latter was of a greyish color, and free from striæ; when extracted, the lens was of a foxy color, and the white spot presented the same appearance as it did when in the eye.

Much diversity of opinion prevails amongst surgeons

as to the relative frequency of capsular and lenticular cataracts. M. Maunoir found only 5 cases of capsular cataract in 221, while Dupuytren found 2 in 5 cases. This enormous difference can only be explained by the differences of operation employed. When depression is the method adopted, it is impossible for the surgeon to determine exactly the nature of the cataract. Of 41 cases of cataract where extraction was the method adopted, the lens was found affected in all.

IV. DIAGNOSIS.—Upon this point little can be said, as no difficulty was ever experienced in determining the exact nature of the disease. It was always an easy matter to distinguish between cataract and amaurosis. In the most incurable form of amaurosis, M. Roux is in the habit of noticing a symptom which often leads him to diagnosticate the disease; and this is an extreme hardness of the globe of the eye, which feels almost as hard as stone under the fingers. It is more difficult to diagnosticate black cataract; but this is a very rare disease. The following case illustrates a curious form of disease, which cannot be classed under cataract, although analogous to it. A young girl, 26 years of age, was admitted into the Hôtel-Dieu, on the 15th of April, 1838. Her sight had become gradually weaker for the last eight years; she can now merely distinguish light from darkness, but is unable to see objects; she can see a little better under a feeble light than a bright one. The pupil is dark, with a light greenish grey tint; the iris grey and contractile; the eyeballs prominent, large, and somewhat firm. On trying the eye with the candle, the inverted image is found to be wanting; the deep one imperfect and enlarged. On the 30th of April the left lens was extracted; it was semitransparent, and not totally free from color, though less yellow than the other lenses extracted on the same day. The posterior surface was bulged and marked by about thirty pale striæ, which converged to a centre like radii; the anterior surface was free from striæ; the centre of the lens was less firm than its surface. The power of vision was restored on this side. On the 21st of May the right lens was also extracted, and it presented exactly the same appearances. The second operation was as successful as the first.

V. PROGNOSIS.—Before the surgeon has recourse to any operation for cataract, he should carefully examine the state of the patient and weigh all indications, whether favorable or unfavorable. Without speaking of such diseases of the visual apparatus as completely contraindicate the operation—viz., amaurosis, atrophy, large spots on the cornea, &c., we shall dwell on those general conditions, and the particular states of the eye, &c., which are favorable or unfavorable to the operation.

Season.—Writers generally agree that the best time for operating is spring, summer, or the commencement of autumn; but a very hot season is just as unfavorable as a very cold one.

Age.—It is natural to conclude that an advanced age is unfavorable to the success of the operation, and the following table shows that up to the age of 50 the results are favorable, and that after that period the cures and failures are so equally balanced, as to prove that advanced age is not so very unfavorable a circumstance as has been supposed. Thus, in the period between 61 and 70, we have 9 cases of

success for 6 failures. One patient, 76 years of age, underwent the operation in both eyes, and recovered perfectly:—

No. of Cases.	Age.	No. of Eyes.	Success.	Failure.	Doubtful.
1	10½	1	1	0	0
2	21 to 30	2	1	0	1
2	31 to 40	2	2	0	0
3	41 to 50	3	2	0	1
6	51 to 60	9	4	4	1
9	61 to 70	16	9	6	1
5	71 to 80	6	4	2	0
1	81 to 90	2	0	2	0
29		41	23	14	4

Still it appears that from 51 to 60, only one half of the cases are successful; in the next period the proportion of cures (9 to 16) is something greater; while from 71 to 80 the operation succeeded in two-thirds of the cases.

Side Operated on.—We are convinced that the operation succeeds more frequently on the left side than on the right, and the reason of this is evident. The left eye is operated on by the right hand, and *vice versa*. When both eyes are affected by cataract, the operator almost always commences with the left eye. Now the patient may be steady under the first operation, yet he will be uneasy under the second one; besides, however practised the surgeon may be, his left hand is seldom so sure or delicate as his right.

Left side	Good eyes	15
"	Bad	7
"	Doubtful	1
		23
Right side	Good eyes	8
"	Bad	7
"	Doubtful	3
		18

It has been said that the double operation is more successful than the single one; but our observations would tend to prove the reverse.

In 13 cases of operation on one eye only, 10 cures; 3 failures. Total 13

In 24 cases of operation on both eyes at the same time, 13 cures; 11 failures. Total 24

—
37

In the first series one-third of the cases were failures; in the second series, nearly one-half.

State of the Eye.—The points to be examined in connection with this division of the subject are the condition of the constituent parts of the eye, its position in the orbit, and the manner in which it is covered by the lids. When the eyelids are close set on each other, the operator is impeded considerably, more especially if extraction be the method which he adopts. In cases of this kind it will be advisable to perform depression. The conformation of the eyelids now alluded to occurred in two patients and in a very high degree; both eyes were operated on in each; two succeeded, and two failed.

The eyeball may be so deeply set in the orbit that it is impossible to bring the point of the cataract knife out at the opposite side of the cornea; in several cases, where this existed in a moderate degree

only, the difficulty of extraction was rendered extreme; this condition, therefore, also indicates the propriety of our having recourse to depression.

The following facts prove the correctness of these remarks:—In 7 cases where the eyeball was slightly sunken, there were 5 cures, 2 failures; but in 8 cases, where the globe of the eye was very deeply sunken, 7 failures occurred.

Prominence of the eyeball is attended with its inconvenience also, and may favor the expulsion of the vitreous humor; but this condition must be rare, as it was noticed once only, and in a slight degree. The case succeeded.

There was no example of spots on the cornea in any of the cases operated on, if we except the children who had received wounds of the eye. Three old persons presented the circular opacity of the cornea, called senile circle; 5 operations were performed on them, and of these 3 succeeded, 2 failed. The circular opacity probably exercises little influence on the operation, unless it be very extensive and encroach on the centre of the cornea.

The natural color of the iris, according to M. Roux's experience, exercises some influence on the result of the operation. The favorable condition does not so much consist in the presence of any particular color of the iris, as in the natural color, whatever it may be, being a clear one. M. Roux affirms that, *ceteris paribus*, the operation for cataract is more successful when the iris is of a grey blue color, &c., than when it is of a deep tint. He does not pretend to explain this, but mentions in connection with it a fact which probably depends on the same cause—viz., that a very common species of cataract with amaurosis is observed in small brown eyes much more frequently than in those of a clear color.

Our observations fully confirm the opinion of M. Roux, which was based on long experience. Thus, in 15 persons with clear grey or light blue eyes, the operation succeeded 11, and failed 4 times. In 13 others, with brown iris, we find 6 cases of success, 5 failures, and 2 doubtful. In 13 other cases, where the iris was of a deeper color, we have 7 failures, 4 cures and doubtful.

Is there any connection between the different states of the lens already noticed and the prognosis of this operation? In order to avoid repetition we have merely noted the cases in which the lens was hard, and those where it was softened completely, or at its circumference. The result leads to little that is positive upon this point.

In 16 cases where the lens was hard, 11 cures, 5 failures; in 13 cases where it was softened, 9 cures, 4 failures.

The state of the pupil, and the rapidity with which it dilates or contracts, afford highly useful indications. Every surgeon knows that no operation should be attempted when the dilatation and immobility of the pupil indicate the existence of amaurosis. In one case the pupil was nearly insensible, but as the cataract had arisen in consequence of injury to the eye, the operation was performed; there was partial amaurosis.

The discharge of any quantity of the vitreous humor is always an unfavorable circumstance. In one case where this occurred, vision was perfectly restored;

but in a second, although the quantity lost was considerable, the power of sight was lost. The same remark applies to any wound of the iris during the operation, or effusion of blood into either chamber. This latter accident happened in one case, which failed. In a case of depression the iris was slightly touched by the knife, and this excited several accessions of vomiting, but the case terminated successfully. When the corneal flap is too small, the pressure required for the extraction of the lens may give rise to discharge of the aqueous humor. In such a case it may be necessary to enlarge the flap with the scissors, and this may be a source of inconvenience. In other cases the same inconvenience may arise from the opening into the capsule not being free enough; but such accidents are rare, and were never the cause of any serious mischief.

VI. *Operation.*—The comparative advantages of extraction and depression have been long the theme of discussion amongst surgeons. It is well known that M. Roux prefers the former method, and he supports his preference by the following arguments:—"As a general method of operation for cataract, extraction has decided advantages over depression. My opinion upon this point is not one of those prejudices which are taken up casually and strengthened by custom. It is founded on a great number of facts. When I commenced the practice of surgery I neither had nor could have had any opinion on a subject which then divided and still divides the opinions of the best practitioners.

I determined to be guided by facts and observations alone, and I continued the latter during eight or ten years. One year I performed more extractions, another more depressions; but I was always careful that the cases should be as similar as the nature of things would admit, with respect to the species of cataract, the individual health, and every thing which might be supposed to have any influence on the result of the operation. Indeed, in a great many cases of double cataract I performed extraction on one side and depression on the other.

During these ten years I performed about 600 operations on 400 persons, one-half by extraction and one-half by depression, and I witnessed the results of about 100 others in which extraction was performed by M. Boyer; and the result of my experience is that the number of complete cures is much greater after extraction than depression, and I have consequently adopted the former method.

It must be clearly understood that these remarks (written in 1819) apply to depression as a *general* method; for I know that several cases may present themselves in which the operation by extraction must be abandoned, and that by depression substituted for it."

The following is a description of M. Roux's mode of operating. The points peculiar to him are only noticed, as the details of the operation are too well known to require any description here. The patient is submitted for a few days to preparatory treatment, his diet is moderate, he takes a few laxative draughts, and has some foot-baths, &c. In every case, without exception, a blister is placed on the neck, immediately before the operation, and if any signs of plethora exist, some blood is taken from the arm. Belladonna is very seldom employed. The patient and operator

are both seated, the latter on a higher seat than the former. When the usual preparations have been made, an assistant raises the eyelid with the index finger of the right hand for the left eye, and *vice versa*, supporting the chin with the other hand. He should make slight pressure on the globe of the eye, until the section of the cornea has been finished. M. Roux makes an oblique flap, according to Wenzel's method, and uses Richter's knife (Beer's) with the common curette.

In drawing up any statistical account of the results obtained by the operation for cataract, it is necessary to distinguish the number of operations performed from the number of individuals operated on. The operations practised on the same individual, in cases of double cataract, should be counted as two operations; for different methods may have been employed, and the operation on one eye may have been very simple, while that on the other may have been exceedingly difficult.

The following is an analysis of M. Roux's operations in 1816 to 1819:—

In 1816, 75 operations on 40 patients. Eyes operated on, 75; failures, 26; cures 49. Persons operated on, 40; failures, 8; cures, 32.

In 1817, 85 operations on 53 patients. Eyes operated on, 85; failures, 37; cures, 48. Persons operated on, 53; failures, 15; cures, 38.

In 1818, 78 operations on 46 patients. Eyes operated on, 78; failures, 34; cures, 44. Persons operated on, 46; failures, 16; cures, 30.

In 1819, 68 operations on 38 patients. Eyes operated on, 68; failures, 21; cures, 47. Persons operated on, 38; failures, 6; cures, 32.

Total, 306 operations on 177 patients.

Proportion of cures to eyes operated on, 188 to 306, or about three-fifths. Proportion of cures to patients operated on, 132 to 177—about seven-tenths.

The conclusions to be drawn from the cases observed by us are very similar.

Patients 29 . . .	{	Extraction 24	{	Success 19
			{	Failures 3
			{	Doubtful 2
	{	Depression 5	{	Success 3
			{	Failures 1
			{	Doubtful 1
Eyes operated on 41	{	Extraction 35	{	Success 21
			{	Failures 12
			{	Doubtful 2
	{	Depression 6	{	Success 2
			{	Failures 2
			{	Doubtful 2

Here, if we omit doubtful cases and add instead the cases of 3 patients operated on in private practice, we have—

Extraction, 25 persons; 22 success; 3 failures. Extraction, 38 eyes; 25 success; 13 failures.

Proportion of failures to cures in respect to patients, as 1 to 8; in respect to eyes, as 1 to 3.

VII. *AFTER TREATMENT.*—After the operation, the patient's eyes are covered with a bandage, and he is placed in a bed carefully protected from light by green curtains; he should lie on his back, and move as little as possible. Four full days after the operation the eye may be examined, and after this period it should

be washed three times a-day with water. About the tenth or twelfth day, according to the state of the eye, the patient wears blue spectacles. The blister must be kept suppurating until all fear of inflammation has subsided.

In some cases the results of the operation are most favorable (12); in others, a temporary displacement of the iris was noticed; in others (6), there was some injection of the conjunctiva, which disappeared in a few days.

Sometimes the result of the case may be rendered doubtful by the appearance of certain unfavorable symptoms. Thus in three cases a yellowish false membrane was formed, in a week or two, at the lower part of the flap, which it pushed forwards; it did not, however, extend, and the wound united by a kind of second intention. The false membrane was finally absorbed, and the cornea recovered its transparency. In one case chemosis and effusion between the layers of the cornea occurred; but these yielded to the application of a second blister to the neck.

In two cases of depression, the lens ascended into its former place, and it was necessary to repeat the operation, which succeeded.

Closure of the pupil, which presented itself in five cases, was successfully treated by frictions with the extract of belladonna over the eyelids, and the pupil recovered very nearly its normal appearance. In one case of depression the pupil was obliterated on both sides.

When the dressings are removed, about the fourth day, it is often easy to see the results of the operation. An unfavorable issue may be expected when the bandage is impregnated with pus, and this is still more to be apprehended if the eyelids are red and swollen. The inflammatory symptoms which occur after the operation of extraction are, generally speaking, much more severe than those following depression, although the results of both are the same. In the former case the superficial parts are more attacked, and inflammation of the cornea sets in; in the latter, the inflammation occupies the iris and deep-seated parts.—*Gazette Med. de Paris*, No. 53.

PRACTICAL OBSERVATIONS

ON

DISEASES OF THE SKIN.

By THOMAS H. BURGESS, M.D., &c.

NO. II.

ERUPTIONS OF THE FACE.

The present paper shall be occupied with the history of *acne*, a disease which belongs almost specially to the face; but, before discussing the nature, &c., of this affection, I shall take the opportunity of offering a few incidental remarks on the revolution which has been attempted to be established within the last few years in cutaneous pathology.

The theory of the vegetable origin of certain diseases of the scalp, first propounded by Unger in 1833, has attracted the attention of dermatologists to that subject, and has found several followers, amongst whom I may mention the names of Schönlein, Gruby, Meynier, and Gibert. The disciples of Unger have extended the application of his theory to cutaneous

eruptions of other parts of the body. Thus we find M. Gruby recently announcing the vegetable origin of *mentagra* or *sycosis*, in short, that this disease is a sort of cryptogamic plant. This writer considers the vegetations supposed to exist in *favus* as belonging to the group of *mycodermata*; while Unger is of opinion that the *favi* are analogous to the "exanthemata of plants." The arguments put forward in support of this very important view are by no means satisfactory or conclusive; and even admitting the existence of these vegetable fungi in *favus*, *sycosis*, &c., it is sufficiently evident, from the memoirs of Gruby and Dr. Hughes Bennett, that they are the *result*, and not the *cause*, of these diseases; moreover, it does not appear that they are invariably present in all cases. It seems to me that these said vegetations are mere *moulds* consecutive of the elementary disease, and not the disease itself. Mr. Erichsen, in his excellent treatise on diseases of the scalp, also rejects this view, and advances it as his opinion that the elementary lesion of *favus* is *tubercle*. When treating of diseases of the scalp, I shall enter fully into this interesting subject.

While M. Gruby and others are advocating the vegetable origin of certain cutaneous diseases, a new theory is advanced by M. Héréau, after thirty years' experience in the treatment of skin affections, who argues that all those eruptions of the skin known under the name of *dartres*, *teignes*, &c., are produced by *animalculi*, which are developed in the skin, and that these diseases can be cured by destroying the parasites with local applications, as in the case of scabies. M. Héréau presented a memoir to the French Academy during the past summer, in which he produces an imposing array of cases illustrative of his peculiar views, but failed to produce the insect. For example, out of 280 cases of *eczema*, he states that 88 cases of the acute form of that eruption were cured within twelve days, and 192 cases of chronic *eczema* within forty days, without general treatment, and simply by means of baths, lotions of warm water, lotions or ablutions with a solution of the deutochloruret of mercury, or by frictions on the diseased surfaces with a preparation composed of sulphur, sulphate of mercury, essence of lavender, and common soap, which he calls *dermaphile*. *Mentagra*, or *sycosis*, has also given way under similar treatment; and in 108 cases of cure, 69 were effected in ten days, and 39 in five days only. In 1,300 cases of *impetigo*, 700 were cured in nineteen days, 380 in eight days, and 220 in three days, by the local remedies above mentioned. Even *porrigo* has not been proof against the "dermaphile," for M. Héréau states that out of 287 cases of cure, 180 were effected in less than nine days by this and the other topical applications mentioned, and 107 in the course of nineteen days, without any relapse. In 120 cases of *herpes* of the face and other parts, a cure was effected "almost instantaneously" by simple local applications with the solution of the deutochloruret of mercury. M. Héréau seems to have a most extensive practice, and the immense mass of cases which he furnishes invests his theory with a certain degree of importance, which otherwise would not attach to it. There is something suspicious in the universal success of a plan of treatment in his hands, which has so often failed with others.

M. Baumès, of Lyons, and M. Devergie, of Paris, have, during the past year, each in a different way to the other, endeavoured to arrange the various diseases of the skin, according to a more philosophical plan, and more in accordance with the laws of medical science than had hitherto been done; but these attempts, however meritorious, merely furnish additional proofs of the futility of endeavouring to establish a lasting classification on any other basis than that of the anatomical seat of the diseases themselves, and the anatomy of the skin must be better understood than it is at present, before precise distinctions can be laid down. Indeed, M. Baumès admits the impossibility of arranging all cutaneous eruptions on the principles of his new classification—thus we find at the end of each order, several diseases described apart which did not exactly come under the category. I shall, however, have occasion at a future period to recur to this subject again, when I may take the opportunity of laying before the reader some of the principal views advanced by M. Baumès in his very elaborate work.* Of all the classifications that have yet appeared, that of M. Cazenave is decidedly the best; I admit that it is not altogether free from fault, but the faults it contains are inherent in the nature of the subject and are beyond the author's control; and the clearness and simplicity of its construction more than counterbalances its defects. Indeed it is as perfect as any artificial classification can be, and the researches of MM. Baumès and Devergie bear testimony to the correctness of this opinion, for both these writers have to a certain extent taken advantage of M. Cazenave's views in the construction of their classifications.

Acne.—To this disease belong all those eruptions of the face characterised by pimples, with or without a red areola. These cuticular elevations are mingled with black spots, and are sometimes accompanied by a hypertrophied condition of the skin. They vary considerably in volume as well as in degree of prominence. They frequently leave indelible cicatrices in the skin, and always disfigure the face considerably. Acne occurs most frequently on the temples, cheeks, nose, forehead, and on the back and chest, neck and shoulders. When it appears on the last-mentioned parts, it seldom attacks the face; and, on the other hand, when the eruption appears on the face, the back and chest are rarely attacked. Both sexes are equally subject to it, and it is much more severe in young subjects than in those of more advanced years.

Much difference of opinion prevails regarding the elementary nature of this disease. Willan and Bate-man considered it to be a tubercular affection, evidently mistaking a consecutive for an elementary lesion. Bielt and Cazenave regard it as a pustular disease, having its seat in the sebaceous follicles of the skin, and the result of inflammation of these follicles. M. Baumès is of opinion that it is neither a pustular, nor a papular, or tubercular affection, properly so called. He considers it to be a "complex eruption," exhibiting an union of two different elementary lesions, as, for example, a *papule*, or *tubercle*, and a *pustule*. M. Devergie agrees with Bielt and

Cazenave as to the pustular nature of this disease, which he considers to be the result of inflammation, or of hypersecretion of the sebaceous follicles. But M. Cazenave also admits that the eruption assumes a tuberculous appearance at certain stages of its course, although tubercle is not its elementary lesion.

There are several varieties of acne resulting from a variation in degree of its pathological element; for example, the disease may originate in follicular inflammation, or it may assume from the first simply a pustular appearance. Again, it may be the result of hypersecretion of the follicular glands, without inflammation, in the event of which the follicles become enlarged, the sebaceous fluid thickens, turns black, and forms those dark spots which are seen scattered over the face. It is only when the inflammation extends to the cellular tissue that the disease assumes that hypertrophied appearance which has been mistaken for its elementary character, and has given rise to the error of classing it with the *tubercular* eruptions.

Acne Simplex.—The mildest variety of this affection is characterised by the evolution of a number of prominent points scattered over the nose, the forehead, and the cheeks, which finally become pustular, the result simply of slight enlargement of the follicles unattended by either heat or pain. The progress of the pustules is not very rapid; towards the end of the second week they point, burst, and the effused fluid dries into a thin scab. At the period of suppuration a slight degree of pruritus sometimes supervenes, which disappears, however, as soon as the pustules burst. The latter may or may not be surrounded with a red areola. Their base is slightly indurated, and they usually terminate in a small white cicatrix of an oval or linear form.

Acne Rosacea, which is described separately by most of the French writers under the name of "*couperose*," is a much more severe and painful affection than the foregoing. This disease occurs most frequently in persons of mature years, and especially in females, producing much disfiguration of the face. It usually appears in the form of a number of red points on the nose and cheeks; these points are accompanied by a sensation of heat and tension, which gradually increases under the influence of certain kinds of food, and of vinous and spirituous drinks. Pustules soon form at the summit of these morbid eminences. The parts affected become the seat of a species of chronic inflammation, the skin is swollen and injected, and assumes a violet tint. The superficial veins are often dilated and varicose, and when all these morbid alterations are present at the same time, they impart to the countenance an extremely disagreeable and repulsive appearance. The disease may assume a still severer form than this. The inflammation extends more deeply into the cutaneous tissue. The pimples are more numerous. The pustules are frequently renewed. The process of suppuration is imperfectly performed, and the prolonged inflammatory action produces a degree of induration in the sebaceous follicles, forming true cutaneous tubercles. The cellular tissue now becomes involved, and the variety called *acne indurata* is the result. The pustular pimples are sometimes of considerable size and of a violet red color. Their base is broad and hard, and they assume

* Nouvelle Dermatologie, ou Précis Théorique et Pratique sur les Maladies de la Peau, Fondé sur une Nouvelle Classification Médicale, &c. Par M. Baumès. Paris, 1842. 2 vols, pp. 1200.

an indolent character. M. Cazenave describes a remarkably intense variety of acne, in which the face is studded over with livid red tubercles, mingled with pustules, both in the incipient and suppurative stages; they are most abundant along the border of the lower jaw, at the inner aspect of the face, and on the nose. The features are completely changed and deformed by the tumefaction of the skin, and the pustules leave a violet tint behind, and a depression which is never removed.

Acne punctata, and another variety first described by Bielt, which he called *acne sebacea*, still remain for our consideration. Both are the result of follicular hypersecretion, of different degrees. The former is characterised by a number of small black spots on the cheeks, especially on the alæ of the nose, which can be felt by pressing the finger gently over the parts. It has been recently announced by a German microscopical observer, that animalculi exist in the black indurations of *acne punctata*. M. Devergie and others deny this statement.

Acne sebacea is the result of hypersecretion of the sebaceous follicles, as just mentioned, produced by inflammation. It commences with a slight degree of irritation, unaccompanied, however, by any alteration from the natural color of the skin. The diseased surface assumes an oily, smooth appearance, and the hypersecretion increasing with the local irritation, a kind of squamous concretion is formed, soft, and slightly adherent at first, but subsequently becoming more firm, and exciting a certain degree of pain when removed by the finger. This concretion falls off spontaneously if a copious perspiration is induced, but it always leaves behind a red inflamed surface. It sometimes remains for several months, especially on the nose, and this morbid product then assumes a blackish appearance, which has often led to mistakes with regard to the nature and origin of the disease.

Such are the principal varieties of acne, one of the most important eruptions of the face, and in whatever form it appears, it is generally a severe and obstinate complaint. Acne depends for its existence upon a variety of causes, and it may be stated in a general way that the different forms it assumes depend a good deal on the period of life at which it attacks an individual, on certain peculiarities of constitution, and on the general state of health of the individual. For example, *acne simplex* and *acne punctata* almost invariably affect young and healthy persons; *acne indurata* and *acne sebacea* on the other hand, attack individuals more advanced in life; while *acne rosacea* (copper nose) attacks persons still more advanced in years, and especially females at the critical period. It is also worthy of remark, that when acne occurs in youth it generally appears in individuals of a sanguineous temperament, whilst it usually attacks persons of a bilious habit when it occurs late in life.

As a general rule, acne attacks females more frequently than males, and this peculiarity is intimately associated with the condition of the uterine functions. For example, it is by no means uncommon to see *acne simplex* in young girls at the period of the first menstruation; and I have already stated that *acne rosacea* commonly attacks females at the turn of life. Moreover, when the menses are suppressed between those periods, one or other of the varieties now mentioned is

developed, the particular variety that shall appear depending on the age of the patient. Acne rosacea may also depend on other causes, as, for instance, gastric or hepatic derangement, high living, abuse of ardent spirits, cold and damp situations, violent mental emotions, the use of cosmetics, and of irritating and astringent lotions. Acne may also be hereditary, and it is often transmitted through several generations. When this predisposition exists, the slightest exciting cause will produce the eruption.

The eruptions of the face with which acne is liable to be confounded are lichen agrius, ecthyma, the syphilides, and lupus in an early stage. For the diagnostic characters of the first of those diseases, I refer the reader to my former paper. Ecthyma can hardly for a moment be mistaken for acne. When it appears on the face, it is always in the form of an eruption of large superficial pustules, terminating in scabs of more or less density, but never in the chronic indurations peculiar to acne. The pustules of the latter affection, it will be remembered, are small, slowly developed, and rest on a hard base. When lupus first makes its appearance, in the form of small cuticular indurations scattered upon the nose and cheeks, it is liable to be mistaken for acne; but the latter is characterised by pustules, which are never present in lupus; and these pustules are surrounded by an erythematous tint. In short, tubercle is the elementary lesion of lupus, and it is always larger than the lesion of acne, even in its incipient stage; besides it is accompanied by considerable subcutaneous tumefaction. When acne assumes the tubercular appearance it is liable to be confounded with syphilitic tubercle, especially that form which occurs on the face. However, even in such cases there are well-defined distinctions between these two very different diseases. For example, the syphilitic tubercle is larger, rounded, shining, and of a coppery color; it appears most frequently upon the wings of the nose, and at the commissures of the lips, whilst the indurations of acne are more pointed, and of a livid color. The same general characters will also distinguish the syphilitic from the follicular pustule of acne; the latter, it will be remembered, repose on a hard, inflamed base; they are developed successively in groups of five or six at a time, and are accompanied by a greater or less degree of hypersecretion of the sebaceous glands, which imparts to the skin a smooth oily appearance. The syphilitic pustules, on the other hand, are developed in greater number, are not so pointed, and are further distinguished by a peculiar tint which belongs specially to the syphilitic eruption; lastly, the cicatrices of the latter disease are depressed and rounded, whilst those of the former are oblong and prominent.

Acne is not a dangerous disease, but its repulsive appearance, the exposed parts it occupies, and its obstinate and frequently rebellious character, invest it with a degree of importance and interest, which would not perhaps attach to it if it occurred on any other region of the body. To females, especially, its existence is a source of absolute misery; and the amount of evil arising from the disease itself is insignificant when compared with the mental anxiety it occasions in this class of patients. The duration of this disease will vary according to the age of the patient and of the eruption itself, and according to the particular variety present.

Treatment.—Although the different varieties of acne are but so many forms of the same disease, still the treatment should vary according to the variety present, and the cause which produces and keeps it up. Unless the causes on which it depends are understood and taken into account, the treatment will be of little avail. When the simple form of the disease is present, and the patient is young and vigorous, M. Biett generally adopted the following treatment, and with success:—Venesection, the frequent application of leeches behind the ears, simple baths, emollient lotions, and an occasional mild aperient. When the inflammation has subsided, or in cases where there is not much local irritation, a gently stimulant lotion, composed of rose-water, lavender, sage, and a small quantity of alcohol, will be found very serviceable. M. Biett was in the habit of using Gowland's lotion, or one very similar to it, the "*eau rouge*" of St. Louis. I have seen obstinate cases of *acne punctata*, which had resisted every other treatment, cured by the application of blisters to the parts. When the disease occurs in females at the critical period, or when the menses are suppressed, leeches should be applied to the groin and vulva; the warm vapor bath and tepid emollient lotions should also be directed to those parts, and the patient should sit over a vessel containing water at a high temperature several times during the day. In *acne indurata*, venesection and mild purgatives, especially if there is inflammation present, and if the patient is of a plethoric habit, will be the most appropriate remedies. The only ointment that can be employed with benefit is one composed of the ioduret of sulphur and lard. The proto-ioduret of mercury ointment, however, has sometimes been recommended.

The Harrogate waters, used *externally*, in the form of lotions, baths, and douches, will also prove serviceable. The vapor douche, applied to the diseased parts for ten or twelve minutes at a time, provided there is no inflammation present, will be found to be the most efficacious remedy in this variety of the disease.

Acne rosacea will require local bleeding at the commencement, and strict hygienic measures. The exciting causes should be carefully avoided—as, for example, high living, spiced food, wine and spirits, mental excitement, heated apartments, sitting near stoves or fires, &c. The vapor douche, and some discutient ointment, if the tubercles are indolent, will be very useful. The red stains which remain on the skin after the disease has subsided, and which disfigure the face so much, require our best attention. Warm milk, mucilage of quince seeds, and local applications of a similar nature, but especially cold sulphureous waters, as those of Harrogate, employed in the form of douche, will be attended with most benefit. The treatment ought to be continued even after the eruption has disappeared, for it is subject to relapse, and it is obvious that in a disease of such a rebellious character, the strictest rules with regard to diet should be enforced, and, above all, spirituous liquors, wines, &c., should be prohibited, and abstained from altogether.

29, Margaret-street, Cavendish-square,
January 10, 1843.

TWO CASES OF HYDROPHOBIA,

WITH REMARKS ON THE PATHOLOGY AND TREATMENT OF THAT DISEASE.

By WM. JACKSON, Esq., Sheffield.

[Read before the Sheffield Medical Society, Dec. 29, 1842.]

CASE I.—Thomas Thorpe was the subject of the first case; his age was seventy; he was of rather spare habit; he had spent the middle period of life in the army, and, whether from that circumstance, or from original tendency, exhibited the character of a man of great firmness of mind, in illustration of which fact he observed, with great animation, during the progress of this terrible malady, that he had never turned his back to an enemy, at the same time seeming to imply that he would struggle hard to overcome the fearful antagonist against which he was then engaged in mortal combat. Thorpe followed the occupation of a laboring man; had been married, and had several children. Two of his brothers and a sister committed suicide; but he had never exhibited any tendency to destroy himself, and his health had been good throughout life. Thorpe resided in the village of Maltby, about twelve miles from this town, and it was at that place where he was bit by a farmer's dog, used for driving sheep, during the last week in August. The wound was inflicted upon the right eyebrow, was small, not lacerated, but deep, and bled slightly; he washed it well with rum, and took but little more notice of it, the healing process being completed in about a week. The same dog bit a boy three days afterwards; and after that a man, and several dogs; and appearing to be laboring under illness was confined, and soon afterwards died, evidently in a rabid state.

Without having complained of indisposition in any marked way, Thorpe was disturbed from his sleep in the middle of the night, between twelve and one (4th and 5th October), and feeling thirsty, called for some water, which he attempted to drink, but found great difficulty in swallowing it, and his subsequent efforts at deglutition of fluids became more and more distressing to him; his mind was put into considerable perturbation; he slept no more that night, nor did he sleep at all during the short period he was doomed to live. Fancying he could get some relief at Sheffield, early in the morning he proceeded thither, where one of his daughters resided, and immediately applied for medical assistance. Mr. Booth, surgeon, of this place, first visited him, and, finding what he had to contend with, soon consulted some of his brethren in the profession, amongst whom was the author of these remarks. During the 5th the general symptoms characteristic of hydrophobia had become established—viz., the dread and difficulty of swallowing fluids, although the former was not so striking as the latter, probably owing to the courageous feeling of the patient; he was not so soon excited by currents of air, or beholding bright substances, &c., as some afflicted by this disease are represented to have been; yet he complained of the agitation of the air disturbing his respiration, and occasioning a very distressing sense of suffocation. He felt a sense of considerable exhaustion from his first seizure, and staggered when walking across the bedroom; his pulse was from

120 to 130, rather weak; tongue covered with a thick white fur; much thirst complained of.

On the night of the 5th, and throughout the 6th, his symptoms varied but little; and if the room in which he was placed were quite still, and no strangers introduced, he would, on various occasions, appear, to a person listening in concealment, as if he were free from ailment. On the introduction of a stranger or of one of his medical attendants, he would rapidly rise from his bed, and talk with great vehemence and agitation of manner, occasionally sobbing and making frequent attempts, by imperfect efforts, to vomit and cough, to remove a copious secretion of saliva or phlegm, which troubled him much. He complained of no pain, either in his head or in any other organ, during the whole course of his suffering. It was with much difficulty he could put out his tongue, the effort to do which gave rise to those distressingly associated actions about the larynx, pharynx, and the general respiratory system, which constitute the leading features of hydrophobia.

This day (6th) one remarkable circumstance rather puzzled us: the pulse, which, as was before stated, sustained the high range of 120 to 130, settled down to 100, with no other peculiarity. There can be no doubt that the habitual firmness of mind, and the course of life which Thorpe had led, considerably modified his case, and gave it less the character of a merely nervous affection than some others on record.

Thursday night, being the fourth night from the seizure, was passed in a dreadful state of alarm of mind and spasmodic struggle of body, in the midst of which he several times attempted to injure his attendants in various ways. In the morning we found him bound down in bed and gradually lapsing into a state of insensibility, in which condition he continued till three, p.m., when he expired.

CASE II.—On the Monday following the Friday on which Thorpe was bitten, the same dog bit a little boy (William Clarke), aged eight, residing in the same village. The wound was inflicted, as in the case of the old man, upon the supercilium of the left eye, and was washed, and brandy afterwards applied. Common dressing was used and it healed in about a week. The dog being considered in a diseased state, the father of this patient procured some medicine in the neighbourhood, supposed to be a specific for hydrophobia, and the lad had continued to take it till the formidable symptoms of that disease appeared. It will be remembered that the active disease supervened in Thorpe on the 4th of October, whereas it was not till Tuesday, the 8th day of November, that the subject of the present case was seized. It was in the night, as in the former case, that the first alarming symptoms appeared. The boy awoke in a fright, and, disturbing his father, asked for some water to drink; but on attempting to swallow it experienced a sudden difficulty, as if there was a constriction around his throat, and he gave up the effort, upon which his father procured some warm tea, thinking it was the coldness of the water which occasioned the distress, but with this the poor boy was as much distressed as before, for, on attempting a second time, the difficulty was still greater, and he relinquished his intention with a feeling of horror.

Mr. Flower, a surgeon of the village, was now

called in, and he prescribed some aperient medicine with antimonials, which occasioned sickness. It was with the greatest difficulty and distress that any fluid could be swallowed. The little patient had frequent attacks of a convulsive nature during the two following days, except on Thursday afternoon, being the third day from the first seizure, when he appeared much better, and engaged in play with a younger brother for whom he offered to make some toys. This state was followed in a few hours by still more alarming symptoms than before, and through the greater part of Friday he suffered from frequent attacks of severe spasms of the throat and chest, almost impeding on many occasions the action of respiration. He died, apparently exhausted, in one of these attacks in the afternoon of Friday, being the fourth day. The duration of the disease in both these cases was within a few hours of the same period. They were both wounded upon the eyebrow. The old man was insensible during the last six hours of the attack, having struggled hard all night, so as to render restraint quite necessary, but the latter case terminated under a paroxysm of convulsions.

The treatment consisted in the exhibition of large doses of opium and mercury externally and internally used; Thorpe was so distressed by the friction of the mercurial liniment upon the abdomen and thighs as to resist its further use, and would not allow the medical attendants who had advised its use to enter his room without being put into a violent rage, and made attempts to commit violence upon them. Croton oil was administered with a view of acting as a purgative, but all attempts to relieve his bowels were perfectly fruitless, and the patient for the last two days of his illness resisted any means recommended for his relief.

Inspection of the Body of William Thorpe, Forty-three Hours after Death.

External Appearance.—That of a stout, healthy, and slightly muscular man. On the lower part of the neck decomposition appeared to have commenced, the green discoloration being present more on the right side of the larynx than the left; the same discoloration appeared over the abdomen to a greater extent. The back and lower parts of the body were discolored from gravitation. Two extremely small white points (cicatrices) were with some difficulty discovered on the right eyebrow.

Cerebrum.—The arachnoid was irregularly opaque and the vessels much congested; on the right hemisphere, about half an inch from the longitudinal fissure, in the middle was a deposit of organised lymph. On cutting into the substance of the brain, there did not appear to be much alteration, excepting that both the cortical and medullary structures were of a darker color than usual. Ventricles contained a quantity of fluid slightly stained with blood. Nothing particular in the appearance of the choroid plexus. The brain (cerebrum) may be considered to have been firm and healthy, the membranes being the only parts apparently affected.

Cerebellum.—The cerebellum, medulla oblongata, and about one inch and a half of the medulla spinatis were removed. Much greater opacity of the arachnoid, and the congestion of the vessels much more evident. Over the pons Varolii there was very great vascularity, so as to give nearly an uniform red coat

to that part; the intensity of this redness gradually diminished on proceeding down the medulla as far as it was cut.* Vascularity much greater over, and in the convolutions of the cerebellum, than on the cerebrum. The structure of the cerebellum was healthy. Opacity of the arachnoid, and injections of its vessels, much more marked on the under than the upper surface of the cerebellum.

Larynx.—Larynx removed together with pharynx. On opening the pharynx posteriorly, a quantity of mucus was found covering its lining membrane, with here and there, particularly on the posterior surface of the larynx, small red patches. (Inflammation or congestion?) The lining membrane of the larynx was slightly thickened, but did not present any appearance of injection.

Thorax.—Lungs and heart presented nothing remarkable, saving that on the anterior surface of the right ventricle was a large but thin deposit of lymph, evidently of old standing.

Abdomen.—Liver natural, containing rather more blood in a fluid state than usual; gall-bag distended with bile; stomach injected in patches in its structure generally, but it altogether presented an appearance of great congestion, being of a dark red color, and on the lesser curvature, near to the cardiac orifice, some vessels (veins) were very much injected, appearing as if extravasation had taken place on the surface. The internal lining presented some small patches of congestion, and was covered with bilious matter. Ilium inflated; cæcum slightly so; colon, &c., contracted, but all of natural color; spleen remarkably small, about one fourth of the usual size, but natural; kidneys normal, perhaps slightly more vascular than usual.

Post-Mortem Examination of the Body of William Clarke, Forty-three Hours after Death.

Turgescence of the venous system of the cerebrum; also the general appearance of bloody spots in the medullary substance of the brain.

An extremely injected state of the vessels of the pia mater, covering the pons Varolii, and surrounding the whole of the medulla oblongata; great vascularity of the mucous membrane of the stomach, but most particularly so in the duodenum; the mucous membrane of the pharynx generally in an injected state, as well as that covering the epiglottis; a highly injected state of the mucous membrane of the trachea and its ramifications; the mucous membrane lining the larynx was but slightly injected.

In the former case especially, and it is probable also in the latter, the patient complained of no pain in the seat of the original wound; nor was there found, in either case, any vesicular formations under the tongue. The mode of death, as I have elsewhere observed, was different; the old man dying in a comatose state, but the boy under the exhaustion of convulsive paroxysms.

REMARKS.

The symptoms of hydrophobia bear a singular resemblance to some forms of nervous disorders; and if it were not from our previous knowledge of the in-

evitably fatal nature of the disease, we should be inclined to offer a favorable opinion as to the result. The intermissions of the spasms and general excitement, during which the patient seems tranquil and almost free from ailment, the pulse and state of watchfulness only being excepted, would lead one unacquainted with the disease to infer, not only that the sufferer was free from immediate danger, but even that his recovery might be rationally hoped for. The disease to which hydrophobia bears the greatest resemblance is hysteria, in which we notice the globus, spasms, and hurried or irregular state of respiration, all occurring in the paroxysmal form. The most remarkable and distinguishing feature in hydrophobia, especially in its advanced stage, is the copious secretion of saliva and mucus, the seat of which seems to extend through the mucous membrane of the mouth, pharynx, œsophagus, and larynx. This secretion seems to act as an exciting cause of the spasms, and the efforts to dislodge it constitute an almost incessant labor and distress, thus exciting a combined effort of those powers concerned in the act of vomiting and coughing, partially and imperfectly exercised.

The most remarkable symptoms of hydrophobia are confined to the organs supplied by the pneumogastric nerves; and it is highly probable that the distress arising from an attempt to swallow fluids excites the respiratory organs, and produces that singular train of spasmodic actions which occupies the organs of deglutition and respiration. This view, as we have seen, is borne out by the morbid appearances. The most prominent symptoms of this horrible malady appear to be seated in the nervous system; but, inasmuch as the intellectual powers are generally unimpaired, we should, from a consideration of the locality of the deranged actions, infer that the medulla oblongata and spinal marrow, or both, and probably the cerebellum were the seat of, at least, the proximate cause of the disease. But a difficulty still presents itself. What we consider a cause is probably but an effect, and so may be other morbid appearances which present themselves in these cases. The blood, it is highly probable, is the real seat of the *materies morbi*, the specific force of which is determined to that portion of the nervous system connected with and including especially the pneumogastric, phrenic, and spinal accessory nerves, from a deranged action of which all the phenomena of the disease may be deduced. It is highly probable that the visible remains of the inflammatory action in the medulla oblongata and contiguous parts, together with the similar appearances in the pharynx, larynx, œsophagus, and stomach, may be the result of excessive actions of those parts occasioned by inappreciable derangements in the blood, or more probably from the poisonous principle of hydrophobia circulating in that fluid, and acting in accordance with the laws manifested in other cases by which the secondary actions of the morbid cause are determined to particular parts, thus giving the disease its peculiar character.

The patients die, as it appears, from exhausted excitability. During the progress of the least complete development of hydrophobia there is not an interval of perfect repose—no sleep—and although the disease is manifested by severe paroxysms, yet the intervals are not states of complete quiescence, but a kind of

* The vessels of the pia mater in connection with the medulla oblongata, especially about the parts which give rise to the filaments of the pneumogastric nerves, were highly injected.

anxious waiting for recurring excitement. There are several convulsive diseases of apparently equal severity to this, but which terminate generally in recovery; as examples, we may notice epilepsy and severe forms of hysteria. The nervous system in hydrophobia is under the influence of a more permanent morbid impression than exists in those diseases, and one which, unhappily for mankind, neither the powers of the constitution nor the resource of our art have yet been able to counteract; and although I should not feel disposed to discourage the most energetic use of every rational means for the relief of those who have the misfortune to be afflicted by this dreadful malady, yet a kind of melancholy feeling hangs upon my mind, that, after its actual development, hydrophobia will never be cured.

In order, as it appears to me, to secure a probable chance of success, we should acquire possession of the constitution first; or, in other words, anticipate the symptoms indicating the presence of the disease by some powerful stimulus, on the principle of one general action preventing or superseding another. In order to attempt the accomplishment of this object, I would recommend the administration of mercury in all cases of persons who have suffered from the bite of an animal known to be in a rabid state, and that such individuals should be kept under the moderate influence of that mineral during a period of at least three months. It is true, mercury has been generally resorted to in hydrophobia, but it has, as far as I know, only been used after the peculiar symptoms of the disease have manifested themselves, and whether its specific effects have, under such circumstances, been fully established, is doubtful, owing in some measure to the tendency in this disease (hydrophobia) to excessive secretion of the salivary glands and mucous surfaces of the pharynx, &c. My idea is, as before stated, to get the first possession of the system, and we know of no stimulus so steady and general as that of mercury. It unfortunately happens too generally that the treatment of persons bitten by rabid animals is referred to empirics, to some notorious or inefficient nostrum or pretended remedy, and it is only when the last horrible symptoms manifest themselves that a medical practitioner is consulted.

There are some writers on hydrophobia who consider the disease to be much connected with the imagination; but surely these two cases tend amply to refute such an opinion, the old man possessing remarkable firmness of mind, and the boy quite free, easy, and unconscious as to the dangers of his situation.

On referring to the article in the "Encyclopædia of Medicine," by Dr. Bardsley, on Hydrophobia, he divides it into three stages, the second being what he terms the stage of recrudescence, having reference to the reopening of the original wound. In the first case, the original wound never reopened, but remained firm from the first healing till death. In the second, this state (reopening) of the cicatrix was observed about four or five weeks before the symptoms of hydrophobia appeared.

CASE
OF
EFFUSION ON THE BRAIN
AFTER SCARLATINA.
TO THE EDITORS OF THE PROVINCIAL MEDICAL
JOURNAL.

GENTLEMEN,—I send you the following case of effusion on the brain for insertion in your Journal, if you deem it of sufficient interest to occupy a place in its columns.

Your obedient servant,

THOMAS A. S. STOCKER,

Member of the Royal College of Physicians,
London, and Senior Physician to the
Ludlow Dispensary.

Ludlow, January 10, 1843.

Mary Weaver, aged fourteen, has never menstruated; is a child of fair complexion and light hair; had scarlatina simplex, accompanied with very little sore throat. This account I heard from her sister. No medical man was called to attend her during the disease. Nearly one month had elapsed when I was sent for.

August 7, at ten in the morning, I found her lying on a sofa; the countenance was pale; the extremities cold; pulse at wrist scarcely perceptible; action of the heart weak; she was deaf, and quite blind; the pupil was greatly dilated; convulsions; bowels confined. I may here state, she had frequently complained, for more than a week, of great pain in her head, and occasional giddiness, attended with faintness. During sleep she talked and screamed, so as to be heard over the house. She eat a hearty breakfast of ham and bread and butter, with tea; before I left she was very sick, which I felt anxious to encourage, and endeavoured to give some mustard in warm water, but without success. I ordered ten leeches to be applied to the temples, and mustard poultices to the feet; cold applications to her head; enema with castor oil and gruel, immediately; four grains of calomel, with twelve of scammony, in the evening. The cataplasms remained on more than one hour, and she took some portion of the powder. Frequent and strong convulsions now occurred; the pupil was still dilated; the head hot; bowels not open. The leech bites bled freely, apparently with some relief; there was a restless tossing of the head about, and the legs were drawn up, as if the patient suffered from pain in the bowels. The following powder to be taken immediately:—

Calomel, four grains;

Croton oil, one drop.

Continue enema.

Has passed no water, and very little motion, and that of a hard and scybalous nature; was quite unconscious of its coming away; feet still cold. Repeat cataplasm and cold application to the head. Difficulty in swallowing; lips to be moistened with wine and water.

8. Is in very nearly the same state as yesterday. Pupil still dilated; insensible to light; bowels open a little; several attacks of convulsions during the night, which at length produced great weakness and exhaustion; pulse low, 60; not any sleep. Ordered a small quantity of tea, toast and water; to take

four grains of calomel every three hours; enemas to be continued; mustard poultice on the top of head.

Evening. Bowels open very little; convulsions less frequent; feet warmer; still tossing of head about, and restlessness. Poultice remained on two hours, with some apparent relief; head not so hot. Enema repeated. Ordered to take the following powder at night:—

Calomel, four grains;
Dover's powder, four grains.

Pulse about 60.

9. Rather more quiet; had about two hours' sleep after taking the powder; convulsions during the night; bowels open once; has passed no urine since Sunday; pupils rather less dilated; pulse low and irregular; able to swallow better. Ordered arrow root and brandy in small quantities and frequently, as the patient is very weak and exhausted. Feet warmer; head not so hot. To take the following powder immediately:—

Calomel, three grains;
Elaterium, half a grain.

Four tablespoonfuls of the mixture in a pint of gruel for injection every three hours.

Infusion of senna, eight ounces;
Tincture of senna, half an ounce;
Croton oil, eight drops. Make an injection.

Three, p.m. Certainly not worse; pupil less dilated; very restless, as if suffering pain; can swallow better; bowels have not acted; arrow root and brandy appeared to revive her. Continue remedies.

Eight, p.m. Symptoms rather more favorable; pupil less dilated; pulse regular, about 76, weak. Her father called to say that the bowels acted freely three or four times, but she was quite unconscious of it; apparently felt more comfortable and tranquil, with return of slight consciousness. From the bowels being freely evacuated, and the patient not having any sleep for three days and nights, the following powder was ordered to be taken immediately:—

Calomel, four grains;
Opium, half a grain.

Enema in case the bowels do not act.

10. No sleep during the night; more quiet; no return of convulsions; bowels freely open, and a great quantity of urine has passed; pulse very low, 55 to 60, fluttering; pupil less dilated. The following draught to be taken immediately:—

Camphor mixture and water, of each half an ounce;
Laudanum, fifteen drops;
Compound spirit of lavender, half an ounce.

About midday, after having enjoyed some hours' quiet sleep, she awoke rather confused, and asked the nurse what was the matter and how long she had been in bed. On being asked a few questions, she answered them rationally, but very soon relapsed into a comatose state.

Evening. Pupils less dilated; bowels acted six times freely; after each evacuation she felt more collected, and knew those around her. When I came into the room she spoke to me, and answered questions very rationally. To take the following powder immediately:—

Calomel, three grains;
Dover's powder, four grains.
Enema, if requisite.

11. Slept many hours during the night; pulse 70; bowels acted freely without enema; more conscious of what was being done about her. Took nourishment, broth and beef tea. Two tablespoonfuls of the following mixture every four hours:—

Camphor mixture, two ounces;
Tincture of hyosciamus, two drachms;
Compound decoction of aloes, six ounces.

12. Has had a good night; pulse more regular; action of the heart less frequent; tongue cleaner; pupil still a little dilated; bowels opened freely; evacuations healthy; return of consciousness and more collected than yesterday. Broth and beef tea during the day. To take three grains of calomel and half a grain of opium at night. Mixture to be continued, with strict orders for her to be kept quiet.

13. Did not see her during the day; Dr. Walker kindly visited for me, and found her better. She had had a good night, and was quite conscious of every thing. Pulse regular; bowels open. To continue the mixture.

14. Passed a quiet night, and is sensible; bowels regular; secretions healthy; pulse weak but regular; breathing natural. As she was tired of bed, I allowed her to be moved into another room on the same floor. Light pudding for dinner. Continue the mixture.

15. Slept from five last evening till seven this morning. Bowels freely open; pain in the head gone; circulation more general. Some chicken to be taken for dinner. The mixture during the day, so as to procure two or three evacuations. The following powder every night—calomel with chalk, four grains. I did not see her for several days, when, one morning, to my great astonishment, she called with her father, quite recovered, to thank me for my attention during her illness.

REMARKS.

From the time the eruption disappeared to the Sunday I first saw her (near one month) she frequently complained of general debility with occasional pain in the head and loss of appetite. There was no swelling resembling dropsical swelling, but an inflammatory state, which terminated in effusion on the brain, a disease which not unusually follows scarlatina, if not properly attended to. I have very little doubt, had medical assistance been procured earlier, and purgatives given, the dangerous symptoms which followed would have been prevented. It may be asked, why were not blisters applied to the neck or legs? The reason, in my opinion, was clear; there was already too much excitement going on in the brain, which would have been increased by counter-irritation too near the seat of disease, accompanied with great debility. Three days and three nights passed without sleep. I thought the only plan for allaying the very great excitement was to give small doses of opium with calomel, which had the desired effect without producing constipation of the bowels. She is at present and has been ever since in perfect health.

ON ABDOMINAL APOPLEXY IN NEW-BORN CHILDREN.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The causes of death in still-born and new-born children are involved in considerable obscurity, which mainly depends upon the fact that inspections do not so frequently take place in such cases as they should do. Any contribution on this subject becomes important, from the dearth of information that exists; and on this account I send you the following case, in confirmation of some views lately published by Dr. Von Kiwisch, of Prague. These are noticed in the current number of the "British and Foreign Medical Review," p. 248. Dr. Kiwisch has noticed four cases of hæmorrhage from the intestinal canal, and in all the children were at the full term and the labors easy. In two the umbilical cord was tied before respiration was thoroughly established, and it had to be untied again to revive the child. The first symptoms of the disease—viz., discharge of blood from the anus and restlessness, appeared from twelve to thirty hours after birth; tumidity of the abdomen, with dulness on percussion, soon followed; the children became quiet and pale; in two instances vomited blood; and in all cases the infants died within forty-eight hours after birth, with all the usual signs of exhaustion from hæmorrhage. The morbid appearances named by Dr. Kiwisch are very similar to those noticed in my case. He thinks that premature tying of the funis is the cause of the complaint; but perhaps it is not the only cause, since I could not attribute it to that circumstance in the case related below; for wherever I find the vitality of a child feeble at birth, I leave its connection with the mother through the umbilical cord undisturbed for an unusually long period. My reason for doing this is because I have often seen a funis, which had ceased pulsating at birth, recommence its pulsations five or ten minutes after all hope of such an occurrence had ceased on the part of the midwives of our hospital who have been present; and I have seen children born with all the symptoms of asphyxia thus restored to perfect respiration. I consider this mode of relieving the lividity and congestion of surface observed in asphyxiated children preferable to the plan of allowing blood to escape from the divided funis; first, because it is a more natural and, therefore, better method; secondly, because it saves the expenditure of the child's blood; and thirdly, because if it should fail, we can still resort to the division of the funis.

I am, Gentlemen,

Your obedient servant,

THOMAS DORRINGTON,
Surgeon to the Manchester and Salford
Lying-in-Hospital.

Manchester, Jan. 9, 1842.

CASE.—On the 1st of March, 1842, I attended a woman for tedious labor. The midwife informed me that the head of the child had been wedged in the pelvis for four hours without advancing, but that it had begun to make a little progress before I arrived. The woman was strong and plethoric, and had always had tedious labors before; I took about a pint of blood from her arm, which facilitated delivery so much that

the head was born in a few minutes after the arm was tied up; it was much elongated. The child, when born, was nearly asphyxiated, but by care the respiration became fully established before I left the house. On the 3rd of March the child, which, according to the accounts of the attendants, had been more or less convulsed since birth, began to part with blood from the anus, and continued to do so for twenty-four hours, when I was sent for to see it; I arrived just in time to see it die; it was slightly convulsed, extremely pallid, and had the usual appearances of death from hæmorrhage.

Autopsy.—The head was not examined; the viscera of the thorax were healthy; the *whole* of the small intestines contained blood, in some parts more, in some less; in some parts clots were observed, in others the blood seemed mixed with mucus; there was no abrasion nor ulceration of the mucous membrane in any part; but where the greatest quantities of blood were it seemed rougher and a little softer than natural. The stomach and large intestines were free from this bloody effusion, excepting the *cul de sac* of the cæcum, which contained a little coagulated blood. The other abdominal organs were healthy, but pale.

WOUND OF THE THROAT.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I have read with much interest the paper on staphyloraphy lately published in the Journal, detailing numerous cases in which the operation has been performed by M. Roux, many of which have been very successful. The failure of some appears to have arisen either from the want of food or the difficulty of administering it. Probably the plan adopted in the following case, with such complete success, may be applicable in cases of staphyloraphy, and obviate one of the difficulties of this important operation.

Richard Watson, aged forty, cut his throat on the 10th of June, 1817, with a common case knife. I saw him ten minutes afterwards; the bleeding, which had been very profuse, had ceased; he was breathing with great difficulty; he had no pulse at the wrist, and appeared to be dying. On raising him from the ground into a chair, he began to revive, and after a short time the pulse returned and the sweating ceased. On examining the wound, it was found so extensive that it appeared extraordinary how the carotid artery should have escaped; the trachea was completely cut across below the os hyoides, and the anterior part of the œsophagus divided. The knife being blunt, the parts were a good deal lacerated, and as the wound was so high, all the parts connecting the jaw were completely divided, together with the thyroid and lingual arteries. The injury was so great that it appeared useless to attempt anything; but, finding no return of bleeding, I connected by suture some of the divided parts, leaving the trachea exposed, through which air and bloody mucus escaped. During that day he remained in a very precarious state, and towards night was much harassed by a distressing cough. At five o'clock on the following morning I found him in a state of the greatest exhaustion. An elastic catheter was passed through the nostril into

the lower part of the œsophagus, and some warm milk and water injected into the stomach by means of an India-rubber bottle. According to Baron Larrey's phrase, he immediately "testified his gratitude by the liveliest sensations," and made signs for a slate which hung in the room, on which he wrote as follows:—"I repent of what I have done; I am entitled to a small estate in Yorkshire after my mother, which I will make over to you if you will try to save my life." I fed him regularly three times a-day with milk and broth for several weeks, and he ultimately completely recovered. He breathed entirely through the wound of the trachea for six weeks, during the greater part of which time he was much annoyed by the constant discharge of frothy mucus. He died fifteen years after this at Ecclesfield, in Yorkshire.

I am, Gentlemen,

Your obedient servant,

JONATHAN TOOGOOD.

Bridgwater, January 10, 1843.

UTILITY OF OPIUM IN STRANGULATED HERNIA.

[In a former number of the Provincial Journal we published several cases illustrative of the effects of opium in strangulated hernia. We extract the following from a late number of an American contemporary.]

CASE I.—On the 6th of September, 1836, I received an urgent summons to Tully, Onondaga, Co., to perform the operation of strangulated hernia. The distance being 16 miles, I did not arrive there until midnight, when I found the patient easy, the hernia returned, and he under the full influence of opium. His attending physician, Dr. Van Dusen, informed me that the patient, an old gentleman by the name of White, had labored under an inguinal hernia of large size for many years; it had often been strangulated, but had been reduced without much trouble until this time.

Early on the morning of the 6th, Dr. Van Dusen was called to see the case, and found that the patient had been in pain with it since early in the evening preceding, and had made unavailing efforts to replace it. The tumor was large, hard, and exquisitely painful and tender. He was bled to faintness, and took nauseating doses of tartrate of antimony; cold evaporating lotions were applied, and the taxis persevered in until the tenderness in the tumor was such as to be no longer endured. The operation then appeared the only remedy; but as the patient's sufferings were great, the Doctor gave him a large anodyne of sulphate of morphine, and sat down, patiently awaiting my arrival. Four hours after, the patient became perfectly easy, when the hernial tumor spontaneously disappeared. A dose of castor oil was given next morning, and his recovery was rapid.

CASE II. July 16, 1838.—Was called to see an apprentice to a cabinetmaker, aged fourteen years; had been afflicted with inguinal hernia, of small size, for several years; had worn a truss; strangulated six hours when I first saw him. The taxis was employed, then bleeding *ad deliquium*, nauseating doses of ipecacuanha, cold to the tumor, and the taxis resorted to,

and persevered in until the abdomen became bloated and tender; the tumor was so sore that the patient could not bear to have it handled, and the operation appeared the only measure left. A full dose of morphine was administered, and I began to prepare for the operation; in two hours he became entirely easy, and the tumor disappeared spontaneously. His recovery was rapid.

CASE III.—Stephen Chandler, aged sixty-three. With an inguinal hernia, of many years' standing; of intemperate habits. After lifting a heavy weight on the morning of the 25th of September, 1840, the hernial tumor became much enlarged, and he was unable to return it; being from home, he received no assistance until evening, when he sent for me. I found him in excruciating pain, with vomiting, tumid abdomen, and the hernial tumor tender and very hard. Venesection was immediately resorted to, with cold to the tumor, nauseating doses of ipecacuanha, and a perseverance in the taxis for two or three hours, with no other effect than to aggravate the sufferings of the patient. He was anxious for the operation, and I decided to perform it as soon as daylight should appear. About twelve o'clock, a full dose of morphine was administered, and I returned home. Next morning, at an early hour, I visited him, in company with Dr. Daniel Havens and my pupil, Mr. H. O. Jewett, and prepared to operate; but to our surprise, we found the patient in a quiet sleep. He informed us, that about four hours after taking the morphine, and after he had become quite easy, he elevated his feet against the wall of his room, and that in a few minutes the tumor disappeared.

CASE IV.—Mr. Butts, of Summerville, Cayuga Co., who had been afflicted with a very large bubonocoele for a great many years, and who wore an imperfect truss, had the hernia strangulated on the morning of the 26th of November, 1841. Being unable to return it, he sent for Drs. Cook and Bennie, who used all the ordinary methods of reduction, without effect, for several hours. I was sent for to perform the operation; but to relieve the patient from the intolerable agony which he endured, while awaiting my arrival, a full dose of morphine was given to him by his medical attendants. In six hours from the time of its administration, and half an hour before my arrival, the tumor disappeared; the patient had fallen into a dozing state, and the hernia had spontaneously returned without any effort being made. The medical gentleman informed me that the size of the tumor was that of a cocoa nut, very hard, and so tender that touching it caused great agony.

In all these cases it will be observed that depletion had been freely used, with nauseating doses of medicines, and the taxis tried and persevered in as long as was prudent, and until the tenderness was such that it could not be borne. The use of the opium was accidental (at least in two of the cases), and not given with a view to facilitate the return of the hernia, but rather to relieve the intolerable agony while awaiting the arrival of a surgeon. In every instance, the relief was soon after the system began to feel the effects of the doses, and before the perfect relaxation which the full effect of opium produces. One striking effect was observed in all the cases. The patient ceased bracing his muscles and straining, which they are apt

to do when laboring under strangulated hernia, which produces tension of the abdominal muscles, and greatly hinders the return of the protruded bowel. The bleeding and other relaxing measures, which preceded the administration of the morphine, no doubt had their influence in preparing the system, as I have often observed that the good effects of opium are much more happy subsequent to thorough depletion. Tobacco injection I have not myself used in strangulated hernia; I have seen it used, but I must say, not with that success which impressed me favorably; it often produces unpleasant effects—more often I think, than is generally apprehended. I should much prefer the *narcotism* of opium to any other of that class of remedies; and if it does not succeed, the patient is, from his calmness and quietude, admirably prepared for the operation.—*New York Med. Gaz. and Amer. Jour. of Med. Sci.*, September, 1842.

REVIEWS.

Food, and its Influence on Health and Disease. By MATTHEW TRUMAN, M.D., &c. 8vo. pp. 340.

There is no subject connected with hygiene on which so much error prevails amongst the public as that relating to food, and when it is borne in mind that mal-assimilation, arising from errors in diet, and their consequences, disorder of the stomach and chylipoetic viscera, is the *fons et origo* of a host of diseases, the importance of general information in a correct form on this subject will at once be admitted. A great majority of the community think the one and only thing needful as regards health is a good appetite, and provided a person is able to eat heartily of any food placed before him there is no fear of organic disease. It is the quantity and not the quality of the food used at a meal, which they consider to be of importance; hence the "cramming" system adopted in feeding infants and children, and its invariably untoward results. Nothing delights a nurse or mother more than to let the little being entrusted to their care bolt its food in good style. In their opinion there is no surer means of inducing and preserving health than the continuation of this stuffing system.

It is with the view of correcting these erroneous opinions, and of diffusing useful and practical knowledge in a simple form amongst the class alluded to, that Dr. Truman's treatise has been published. The author has succeeded in writing a work which, at the same time that it conveys some useful information, is entertaining, and there is no more certain method of gaining the attention of the general reader than by investing all subjects relating to science with the interest which attaches to anecdote and way-side stories. The chapters on the different effects of vegetable and of animal food are deserving attention, also that which treats of the effects of "mixed diet." The dietetic rules are judicious and clearly told. But the best chapter in the volume is that on "nutrition," with which the work concludes, and this portion of it at least, we can recommend to the attention of our readers.

ACADEMY OF SCIENCES, PARIS.

December 27, 1842.

ANALYSIS OF SUBSTANCES CONTAINING ARSENIC.

M. Jacquelin forwarded a memoir on this subject.

In endeavouring to detect arsenic in cases of poisoning with that substance, the author employs a current of chlorine, and operates on measured quantities of the fluids, instead of carbonising with sulphuric acid, drying the carbonised matter, and then treating it with nitro-muriatic acid.

In order to avoid the loss of arseniuretted hydrogen, which takes place in a straight tube, he employs one in the form of S. He collects the most minute quantities of the arseniuretted hydrogen by means of the chloride of gold.

As regards phosphuretted hydrogen, portions of moist hydrogen passing through a small tube containing the fifth of a grain of phosphuret of barium, yielded all their phosphuretted hydrogen in the first curve of the tube. Although antimoniated hydrogen is as easily condensed by the chloride of gold as arseniuretted hydrogen, we are not to conclude that the method of detecting arsenic can be applied to the detection of antimony; for solutions of the latter yield only a small portion of the metal, the rest being precipitated. Hence, since the chloride of gold acts in so ready and exact a manner on infinitely minute quantities of sulphureous gases, on arseniuretted, antimoniated, and phosphuretted hydrogen, the author thinks that it may be advantageously employed in the analysis of these gases, and in the delicate experiments connected with the examination of impure air.

ACADEMY OF MEDICINE, PARIS.

January 3, 1843.

SYPHILITIC ERUPTIONS.

M. Jolly presented a report on a memoir by M. Gibert, on syphilitic eruptions.

The question proposed by the author is—Are these diseases always secondary? Are they never primary? To answer it he examines all the doctrines and facts recorded on the subject, and concludes, that syphilitic diseases of the skin are invariably the consequence of a primary venereal infection.

Having combatted the ideas of M. Ricord, with respect to inoculation, the author proceeds to describe syphilitic eruptions, which he divides into eight species, distinguished by their external characters.

M. Gibert recommends a constitutional treatment and gives a preference to mercurial preparations, in favor of which the best authorities are united.

In answer to the objections of M. Gibert, respecting inoculation, M. Ricord observed that he was about to present the academy an interesting preparation, but would first allude to a subject which so nearly interested him. To prevent repetition he would enounce the following propositions:—

No secondary symptoms, and consequently no syphilitic diseases of the skin, can occur without having been preceded by chancre.

If, to admit the existence of chancre, we require the presence of a certain number of external appearances—the characters denominated *Hunterian*—there is an end to all science on the subject. The specif

character of chancre does not exist in the form, color, base of the ulcer, &c., but in the nature of the pus, which it secretes, and which may be determined by inoculation.

On the other hand, if the existence of chancres is to be denied unless the ulcer be seen, we are compelled to deny the possibility of their existence in situations where the eye cannot penetrate; in the urethra, for example, and in the vagina or neck of the uterus, before Mr. Ricord succeeded in introducing the use of the speculum as a means of diagnosis in these disorders. It must be remarked, that the occurrence of chancre of the urethra is rare in proportion to the distance of the part attacked from the meatus urinarius. The question of the *bubo d'embleé* which, at first sight, seemed to contradict the doctrine of M. Ricord, only confirms it.

This species of bubo never contains pus capable of being inoculated; or, if the pus be of this nature, it will be found that the bubo was always preceded by chancre, either apparent or masked. An interesting fact recently occurred confirmatory of this assertion. An interne of the Venereal Hospital had a bubo which he thought to be one of this species, and as the pus discharged by it was not inoculable, he considered the fact irreconcilable with M. Ricord's theory. On examining the urethra, however, carefully, he found a deep-seated chancre within the orifice of the urethra.

After these few remarks M. Ricord showed the preparation already alluded to. It was taken from a patient at the Venereal Hospital, who labored under a gonorrhœa which resisted every species of treatment. A fistulous abscess opened in the perineum. The patient was afterwards attacked by the phthisis and died. The lungs were filled with tubercles, and the whole of the canal of the urethra contained numerous ulcers of a tubercular nature. The prostate gland, also, contained a great number of tubercles.

PATHOLOGICAL SOCIETY OF DUBLIN.

Nov. 27.

PARALYSIS OF THE MUSCLES OF THE FACE.

Dr. Graves said he had to lay before the society some particulars respecting a rare disease of the nervous system, derived from two cases that had come under his notice in the Meath Hospital. In one case there was a spasmodic contraction of the several sets of muscles supplied by the portio dura; in the other there was the opposite effect, paralysis of the same parts. Of both these he exhibited drawings.

The paralysis occurred in a boy of ten years of age, and of a scrofulous habit, who had been admitted into the Meath Hospital laboring under dropsy and diarrhœa. He was several days in hospital, and these complaints had been greatly relieved, when it was observed that there was paralysis of the right side of the face, but obvious only when the muscles of the face were in action. Thus the attempt to close the eye failed on the affected side. There was a discharge from the ear of the same side which originated seven years previously. The opinion formed of the case was, that there was disease of the petrous portion of the temporal bone, and that with this was connected the affection of the portio dura of the seventh

pair, from which the paralysis might be considered to result. There was pain in the head at the right side, which after some time changed its place and moved to the back of the head, and from this time the discharge from the ear ceased. The pain then moved down the spine. A few days before death there were tetanic convulsions and an extreme sensibility of the entire surface of the body. Three years before there had been similar convulsions. The power of locomotion and the intellect continued to the last unimpaired. During the few days which intervened between the first appearance of the convulsions and his death, they had recurred five or six times. The body was examined after death. The portio dura on the face exhibited no morbid appearance. Within the skull a perforation was observed in the dura mater, immediately opposite to the aqueduct of the vestibule in the petrous portion of the temporal bone, which was carious. A green foetid pus detached the dura mater from the bone in this situation, and also bathed the nerves at the base of the brain. The membrana tympani and internal ear had been destroyed. The brain itself appeared healthy. The theca of the medulla spinalis was filled with pus, but the medulla itself (of which Dr. Graves exhibited a drawing) appeared healthy, and the attachments of the ligamentum dentatum were all perfect.

The other case was that of a woman, forty years of age, who was admitted into the Meath Hospital in June, 1841, affected with spasmodic contractions, which occurred several times in a minute, of all the muscles supplied by the portio dura on the right side of the face. The angle of the mouth and ala nasi of the affected side were drawn towards the ear during the spasms, and the fibres of the platysma, participating in the contractions, appeared strongly marked upon the neck. She described the complaint to have commenced four years and a half before, in the lower eyelid, with spasmodic twitchings, which after some time extended to other parts of the same side of the face. Pain in the head had not preceded the attack. The contractions occurred even during sleep: There was no diminution either of sensation or temperature of the affected parts. There was a sensation of noise in the right ear, but without pain, and the hearing continued unimpaired. Could the noise in the ear in this case be accounted for? Was it the muscular *bruit* caused by spasmodic twitching of the minute muscles of the internal ear?

GREEN CATARACT.

M. H. Cunier, in a report of the diseases treated at the Ophthalmic Dispensary of Brussels, invites attention to this form of cataract, which is often confounded with glaucoma, and the unfortunate patients thus abandoned to darkness. Dr. C. says, that he has met with eight cases of this kind. The individuals labored under green cataract, which had been mistaken for incurable glaucoma. Seven of these patients were operated on and restored to sight.—*L'Examineur Médical*.

RETROSPECT OF THE MEDICAL SCIENCES.

THE OPERATION OF LITHOTOMY.

Mr. Syme, of Edinburgh, says, when he first operated for the removal of stone from the bladder, he began under the impression that infiltration of the urine was the great source of danger, and that a free external incision, affording a dependent opening, together with the use of a tube, kept in the wound for two or three days, would effectually protect against any risk of this kind. He also believed that if the prostate were divided to a moderate extent, the aperture might be safely dilated without any further cutting. The first few cases tended, the rather by the success that attended them, to confirm him in this opinion, but meeting with some large stones when force proved necessary for their extraction, his opinion was shaken, because, although the urine passed freely, and the patient made no complaint of pain in the abdomen, yet a feverish excitement followed the operation, and persisted to a fatal termination at the end of from one to three weeks, when the textures at the neck of the bladder were found to have suffered from inflammation and suppuration. Mr. Syme became then convinced that urinary infiltration was not more to be avoided than tearing the substance of the prostate. He, therefore, resolved in future to cut freely through the whole thickness of the gland, and adds, that he can safely affirm that in no case has any bad consequence resulted from so doing; indeed, he attributes the want of success he afterwards encountered in some cases to an incomplete prostatic section, caused either by the depth of the perineum, rigidity of the limbs, bulk of the prostate, or the position of the staff.

His mode of operating he describes as follows:—It is usual to make the incisions of the perineum with the knife which is to be employed for cutting the urethra and prostate, and which necessarily requires a length both of blade and handle considerably greater than what belongs to the scalpel or bistoury, chosen for the ordinary dissections of operative surgery. The instrument is, consequently, less manageable than the smaller one, which should certainly be preferred, especially as the next step of the operation is executed much more easily with it. This is laying open the membranous portion of the urethra, which some operators of great experience regard as the more difficult part of the process. With a small knife there can be no difficulty whatever, or, what is worse, any risk of missing the groove, and injuring the neighbouring organs. The most certain way of attaining the object is to shield the blade with the forefinger of the right hand, and press it upon the groove, so as to make an opening into it, through which the knife, having been turned in the direction of its edge, may be pushed through the apex of the prostate. The operator then keeping the point of his finger in the hollow of the gland, should desire the curved staff to be withdrawn, and introduce a thick straight one, nine inches long, with a wide and deep groove, through the wound of the perineum into the bladder. Holding this sure guide in his left hand, raised so as to elevate the prostate and withdraw it from the rectum, he may, with perfect confidence, introduce whatever instrument he

thinks best for dividing the prostate. Mr. Syme advises the handle to be four inches, and the blade about three inches and a half long, half an inch broad, straight on the back, except just at the point, which should be rounded off to make it run smoothly in the groove, and sharp on the edge, only to the extent of an inch and a quarter. The extent of incision may be regulated with the utmost precision, by the angle at which the knife is held in the groove; and if enlargement proves requisite, it may be safely effected by re-introducing the staff, and running the knife again along it, or using one of a larger size, with the edge rather thin than sharp.

This process, Mr. Syme says, differs from that recommended many years ago by Dr. Thomson, inasmuch as he advised the prostate to be divided outwards and upwards, of which Mr. Syme entirely disapproves, and also from Mr. Aston Key's mode of operating, as he uses from the beginning a straight staff, passed through the urethra.—*Edin. Monthly Journ.*, Dec., 1842.

ENCEPHALOCELE.

A female child was born on the 21st of April at the full period, Mr. Taylor, of Lockerby, officiating as the accoucheur. The labor was completed in two hours. The child's head presented a soft round tumor, rather larger than an ordinary sized fetal head, attached a little under the site of the posterior fontanelle by a pedicle of three-fourths of an inch in length, by an inch in diameter. The tumor was round, soft, and flabby, resembling somewhat a fresh bladder two-thirds full of water, and varying in shape with every change in the child's position. At every part, except opposite the pedicle, it appeared to be very vascular; it was covered by the common integuments. When percussed, it gave a distinct feeling of fluctuation, and on pinching up its thick and flabby outer covering, another of a more firm and tense structure could plainly be felt, and traced to about the middle of the pedicle, where it seemed to terminate; at least, no fluctuation could be detected in the cranial half of the pedicle, while in the part beyond this it was sufficiently evident without applying pressure to the tumor. By compressing it firmly on each side, something of a spongy or fleshy structure was distinctly felt, as if floating loosely in its interior.

The cranial bones were perfect, as far as could be ascertained, the sutures close, and the anterior fontanelle scarcely distinguishable.

The child survived its birth nearly four months, dying on the 17th of August; during the last three months of its existence the tumor increased rapidly in size. On puncturing it after death, three pounds of brownish fluid escaped, and on slitting up the sac, it was found lined with the dura mater and arachnoid membrane, the fluid having been contained between the layers of the latter. The arachnoid was greatly and irregularly thickened here and there by depositions of lymph. In the centre of the tumor, and through the pedicle, projected a hernia cerebri of the size of a duck's egg, covered by the arachnoid and pia mater, which were connected by depositions of lymph forming a false membrane, with the arach-

noidea reflexa lining the sac. On making an incision into the hernia, an ounce of serum, similar in color to that contained in the tumor, escaped. The protrusion took place through an aperture in the occipital bone, three-quarters of an inch in diameter, situated about an inch below the apex of the bone in the median line; its edges were thin and serrated, and the inner table and diploe wanting for half an inch round its margin. About midway between the apex of the bone and this foramen, there existed another, about half its size, through which there was not any protrusion. The portion of brain forming the hernia weighed about two ounces. The spinous processes and arches of the cervical vertebrae were wanting, and serum was contained within the membranes. The father would not allow the interior of the cranium to be examined.

This child was also the subject of a malformation of the genito-urinary organs. The pyramidal muscles, integuments of the pubic bones, anterior wall of the bladder, nymphæ, upper half of the labia pudendi, and the urethra, were wanting. The vagina was perfect. During life the urine was seen passing guttatim from the mouths of the ureters.—*Ibid.*

AMPUTATION.

The "Annales de la Chirurgie Française et Etrangère" contain a communication from M. Hello, surgeon-major of the French marine, describing two cases of severe injury, in which he performed amputation according to two different methods. Both the men were wounded by the unexpected discharge of a cannon while they were loading it. In the one case, that of a man thirty-seven years of age, who had had the left hand carried off, the radius fractured, the integuments in a great measure destroyed, and also a severe contusion with effusion of blood just below the elbow, M. Hello performed amputation by the circular method in the lowest third of the humerus, and then, having tied the arteries, brought the flaps together from behind forwards, and retained them in close apposition by five sutures. In the other, that of a man forty years old, who had had the fingers crushed, the hand severely bruised, the muscles of the forearm as far as the elbow greatly lacerated, and the lower half of the radial artery destroyed, and in whom the outer and posterior part of the integuments of the forearm were much burnt, M. Hello decided upon having recourse to the mode of amputating advised by M. Fouillioy, the principal surgeon of the marine at Brest, which consists in dissecting out an integumental flap, large enough to cover the surface of the stump, after the division of all the soft parts by one sweep of the knife by the circular incision. This operation in this instance was performed by M. Lannaud, who obtained his flap from the inside of the forearm, care being taken to include the cellular tissue with it, and that its connection with the stump should be sufficient to prevent its mortifying. The flap was kept in apposition by adhesive plaster.

In the case operated on by the circular method only, in which the sutures were applied, union by the first intention took place speedily, and from the fourth day, when the sutures were removed, five-sixths of the cicatrix were left without any other covering than a mere compress. A phlegmonous abscess formed on the inner side of the arm, and discharged itself by the channel formed by the ligatures on the arteries. In

the other case, an equally early instance of union by the first intention would have been met with, but that the ligatures came away very late, the last not separating until the twenty-second day. In both these cases, M. Hello considers that cicatrization really took place on the sixth day.

He says that the operation of M. Fouillioy will be adopted by all who will give it a trial, and he anticipates that in many instances it will entirely supersede the old plan. It has the advantage of giving a longer stump and a better covering to the bone, even when cicatrization takes place very slowly. He mentions seven cases in which he has either performed this operation, or seen it done by others, every one of which was attended with marked success. The reason assigned by M. Fouillioy for omitting the muscles in the flap he makes is on account of their greater or less contraction, and because they gradually become thinner, and finally either disappear altogether, or are reduced to a fibrous substance, too insignificant to protect the stump.

PREVENTION OF LEAD COLIC.

Mr. Benson, the managing director at the British white lead works, Birmingham, says that the use of what he calls sulphuric beer by the workmen is an effectual preventive of the colic arising from the effects of the lead, and which, previously to the employment of the sulphuric beer, was exceedingly prevalent among the men. He was induced to try it from a statement made some time since, that sulphuric lemonade had been successfully used at a white lead manufactory in France. Its action must be effected by the chemical transformation of the poisonous carbonate into the innocuous sulphate of lead. The formula for the preparation of the beer is as follows:—Take of treacle, fifteen pounds; bruised ginger, half a pound; water, twelve gallons; yeast, one quart; bicarbonate of soda, one ounce and a half; sulphuric acid, one ounce and a half by weight. Boil the ginger in two gallons of water; add the treacle and the remainder of the water hot. When nearly cold, transfer it to a cask, and add the yeast, to cause fermentation. When this has nearly ceased, add sulphuric acid, previously diluted with eight times its quantity of water, and then the bicarbonate of soda, dissolved in a quart of water. Close up the cask, and in three or four days the beer will be fit for use. As acetous fermentation speedily takes place, particularly in hot weather, new supplies should be prepared as required. The object in adding the bicarbonate of soda is to give a pleasant briskness to the beverage. The sulphuric acid remains greatly in excess.—*Lancet*, Dec. 17, 1842.

THE BLINDNESS CAUSED BY VITRIOL.

Dr. R. D. Thomson read a communication before the British Association, which was afterwards published in the proceedings of the Philosophical Society of Glasgow, on the nature and cure of blindness produced by the application of the oil of vitriol to the transparent cornea. The operation by which he hoped to remove the blindness was grounded on the following considerations:—"The basis of animal matter, according to the most recent researches of chemists, appears to be a substance termed protein, consisting of C_{40} , H_{31} , N_5 , O_{12} , which can be readily prepared from albumen, fibrine, &c., by solution in caustic

alkali, and precipitation by acetic acid. This substance appears to be a base, and combines with acids. When sulphuric acid is brought in contact with it a fine white substance is formed, which may be obtained in the state of a white powder by careful washing and drying. It may be conveniently produced by triturating the crystalline lens of the eye in a mortar, together with sulphuric acid. This acid is termed *sulpho-proteic*, and its formula is $\text{Pr.} + \text{S O}_3$."

The conjunctiva contains as its basis protein, and if sulphuric acid is brought in contact with it, sulpho-proteic acid is formed, and opacity of the conjunctival layer covering the cornea is the result. Dr. R. D. Thomson found by making a series of experiments upon the eyes of dead animals, that when sulphuric acid was applied to the cornea, a layer of sulpho-proteic acid was produced, which could be removed by means of a sharp-edged knife; and that, even after dissecting off the first layer, a second application of the acid will produce a new layer of sulpho-proteic acid, which may be excised or torn off in a similar manner; and in this way that the whole of the cornea may be successively divided into a series of layers corresponding in some degree with the natural structure of that membrane. This method presents, in short, an excellent mode of demonstrating anatomically the layers of the cornea.

Success having thus far attended the experiments on the dead animals, Dr. Thomson determined to extend the principle to the living eye, for which purpose a dog was obtained, properly secured, and the sulphuric acid rubbed by means of a glass rod over the transparent cornea. White opacity was produced in a few seconds. The dog was left quietly for a few minutes, the eyelids being guarded from the influence of the acid, and when again examined, the cornea presented a white appearance, and was obviously quite opaque. The conjunctiva was then removed by means of a pair of scissors, assisted by a scalpel and forceps, and the denuded cornea was then scraped by means of the scalpel, until it appeared to be deprived of its white opacity. A slight degree of dulness remained, which appeared to have proceeded from the exudation on the surface of the cornea, for in a day or two the perfect transparency of the membrane was restored, and the animal lived for many weeks with complete vision of the eye. The dog belonged to Dr. Krauss, who was present at the experiment, and satisfied himself that vision was thoroughly restored in the eye which had been operated on.

Dr. R. D. Thomson recommends this operation to be performed, when attempted, immediately after the receipt of the injury.

HÆMORRHAGE OCCURRING AFTER DELIVERY.

Five cases of hæmorrhage taking place after the completion of labor, and the departure of the medical attendant, are related by Dr. Lever in the October number of Guy's Hospital Reports. In the first three cases pregnancy was complicated with disease of the spleen, in the other two, with Bright's disease, both complications being regarded by Dr. Lever as predisposing causes of the hæmorrhage of the kidney. The two last cases proved fatal. Dr. Lever draws the following conclusions from the details of these cases:—1. That in females affected with enlargement or disease of the spleen, the uterus is predisposed to

dilate, and therefore admits of the effusion of blood into its cavity. 2. That the blood so collected, coagulates, and excites considerable constitutional irritation, as marked by the accession of rigors, fevers, &c. 3. That the fever so produced, in course of time (varying in different cases) assumes the intermittent type, especially when the patients have previously suffered from ague. 4. That such intermittent fever is curable by the same remedies as are successful in the treatment of pure and uncomplicated ague.

With respect to the cases in which the disease of the kidney existed, Dr. Lever concludes—1. That labor occurring in patients affected with morbus Brightii is generally lingering. 2. That in such patients, although the fœtus and its secundines may be expelled by the natural uterine efforts, and the uterus may for a time appear to contract, yet that it is very liable to become relaxed and distended with blood. 3. That in patients so affected, peritonitis of a more or less acute character is prone to occur.

SULPHATE OF QUINA IN HEMOPTYSIS.

Dr. Fantonetti has published two cases of hæmoptysis, in which he administered the sulphate of quinine, the use of which was preceded by venesection, &c., unavailingly, and followed by cessation of the hæmorrhage. In the first case the hæmoptysis was decidedly intermittent, not yielding in the least to four bleedings, but giving way at once to the administration of the quinine, which was ordered by Dr. Fantonetti. In the second instance, that of a woman just recovering from her accouchement, the intermittent character of the complaint was less marked, but the doctor was induced to order the alkaloid, from the want of success which attended the employment of venesection. The hæmorrhage was arrested, and then the quina was omitted; the spitting of blood in consequence soon returned, to be again stopped by the use of the febrifuge, by which it was ultimately cured.—*Giornale della Patologia e della Terapeutica*.

BRIGHT'S KIDNEY—URINE APPARENTLY NORMAL.

Dr. Graves laid before the Pathological Society of Dublin two kidneys from a man named Connell, aged fifty, of intoxicated habits, who had died of consumption and dropsy in the Meath Hospital. Of these the right was of the natural size, and on being cut into appeared pale and granular. The other was one of the best specimens he had ever seen of what is designated Bright's kidney. It was hard and very small; the capsule came off readily, and the surface of the kidney then appeared rough and nodulated, indicating the latter and more confirmed stages of the disease. There had been five examinations made of the urine while he was in the hospital. It was ascertained to be healthy, and had no trace of albumen. This coincided with observations made by Dr. Graves in some other cases. Dr. G. objected to the doctrines of Rayer as inconsistent with pathology. Rayer had asserted that there is an albuminous nephritis, which is only distinguishable by symptoms from common nephritis. But this was inconsistent with cases Dr. G. had observed. Symptoms of disease might be explained, by reference to structural changes, but these changes were not to be explained by reference to symptoms.

Dropsy.—Dr. Corrigan said that the specimens which he had now to lay before the society were

taken from the body of a man of broken-down constitution, who had labored under dropsy, connected with that state of the kidney which is denominated Bright's disease. The surface of the kidney was yet smooth, its substance was yellow, and had no tendency to contract; it was analogous to the pale yellow liver, and it was evident that this was not the first state of the contracted kidney. The liver appeared to be undergoing a similar change of structure, and externally there was a deposit of lymph upon it.

In this case the urine had been slightly albuminous. It had been observed that the quantity of albumen is greatest in the early stages, and diminishes as the disease proceeds. The very low specific gravity of the urine, ranging from 1001 to 1005, indicating the presence of but one-twelfth of its usual solid ingredients, showed that the disease was of the worst and most fatal form.—*Dublin Journal*.

IODURET OF SULPHUR IN PORRIGO.

Dr. William Davidson states that he has found no remedy so efficacious in the treatment of porrigo as the ioduret of sulphur, having repeatedly succeeded in curing the patient permanently with it after a long and fruitless trial with other remedies. His method of treatment is the following:—The head is first well washed with soap and water, the hair is then cut as short as possible with scissors, a poultice is applied, and continued for a day or two if necessary, to soften the crusts, which being removed as thoroughly as possible, the hair is closely shaved. In general, the ointment is not applied until the head has been shaved, but if pediculi be present, it is employed from the commencement, in order speedily to extinguish these vermin. The proportion of ioduret of sulphur employed has varied from twenty to forty grains to one ounce of axunge; but, in general, the latter quantity may be safely used from the beginning, unless there be some unusual inflammatory action present, for it seldom excites any particular pain or irritation. As a general rule, the daily application of the ointment will be sufficient, but in some cases it is advisable to use it twice a-day in order to facilitate the cure. Alteratives, or any particular internal treatment, have rarely been resorted to when the general health was tolerably good. Laxatives have occasionally been prescribed, and a mild farinaceous or milk diet.—*Edinb. Monthly Journal*.

CORONERSHIP OF DURHAM.

Two medical men, Mr. Morrison and Mr. Nixon, have declared themselves as candidates for the vacancy which is about to take place in the office of district coroner at Durham. We trust that the freeholders of the county will follow the example given to them by

Middlesex and many other counties in the United Kingdom, by electing a medical man to the office.

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TO CORRESPONDENTS.

The request of *Mr. Evans* shall be attended to.

The note from an *Union Surgeon* and member of the *P. A.* has been received. We shall probably allude to it in our next number.

L'Experience.—We should feel obliged to the editor of this journal if he would address his numbers to us instead of simply marking London on them. We also take the opportunity of informing him that the "Transactions of the Medico-Chirurgical Society" are not exchanged for journals, either domestic or foreign.

Mr. Wraith's case of Cæsarean Operation has been received, and shall appear in our next.

A Dispensary Surgeon, Ireland.—We shall willingly lend every assistance that we can afford towards defeating the scheme of the commissioners. The Medical Association of Ireland and the editors of the "Dublin Medical Press" are waging battle for the profession in a manner which is beyond all praise.

The Independent Journal.—Some little exaggeration may be permitted, but it is a great fraud to require 7000 bills from tradesmen and advertisers, whereas 3000 are not employed. Not many years ago the house of Longman and Co. took 1700 copies of the journal in question; they now take between 500 and 600. In Ireland, the house of Messrs. Hodges and Smith took 500; they now take seven or eight copies only. These are facts, not words.

ERRATUM.

In our last number, page 291, col 2, line 23, read "where the brain or heart is affected," for "where the brain or head is affected."

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CLINICAL LECTURES

DELIVERED AT THE

METROPOLITAN FREE HOSPITAL.

BY MR. BENNETT LUCAS,

Senior Surgeon to the Institution, and one of the Lecturers on Anatomy and Physiology at the Westminster Hospital School of Medicine.

Lecture IV.—Dec. 30, 1843.

GENTLEMEN,—Before speaking of the morbid discharges to which the urethra is liable, I shall first make a few observations upon its structure and functions. In both sexes the fundamental structure of the urethra is mucous membrane; it is, in fact, a continuation—an elongation, as it were, of the mucous membrane of the bladder, eked out into a tube for the purpose of permitting the contents of the urinary bladder to be evacuated at certain intervals from that viscus. The urinary bladder itself is a reservoir in both sexes, placed in the pelvis to receive by the ureters the secretion from the kidneys, and the commencement of the urethra is placed at its antero-inferior part, the most convenient situation it could possibly occupy for the main use it has to perform. In the female the urethra is simply a curved musculo-membranous canal, seldom exceeding two inches in length, and has only the one office to perform which I have mentioned. It is capable of dilatation to a very considerable degree, so much so that calculi the size of hen's eggs have passed through it, without the intervention of art; and even when the surgeon is called upon to interfere, in such cases the use of cutting instruments is scarcely ever resorted to. Were the urethra in the male subject similar to that of the female, its diseases would doubtlessly be as few as they are in the latter, and would be as much under the, I was about to say *immediate*, control of medical or surgical treatment. But the male urethra is far differently circumstanced; it is destined to perform an essential part in the function of the reproduction of the species, and all the complex deviations which obtain to it in us are subservient to this end. It consists of two distinct portions, the one surrounded by muscles, the other by the vascular structure called *corpus spongiosum*. The former of these resembles in some respects the urethra of the female; it is about the same length, if any thing a little longer; it yields with facility to a distending force, particularly in the young subject, but not so readily nor to anything like the same extent as in the female.

Notwithstanding these points of similarity, this portion of the male urethra presents very important and distinct characters, which should always be borne in mind in the treatment of its diseases. In the first place it is in intimate relation at its very commencement with that important organ, the prostate gland; next it is surrounded by blood-vessels and distinct muscular fibres, which have been variously described

accordingly as they have been dissected by anatomists; and lastly it is somewhat fixed at its anterior extremity just at the point where it passes through, and is completely surrounded by, the fibrous structure of the triangular ligament.

The anatomical relations which this portion of the urethra holds to the surrounding parts have occasioned it to be spoken of under the names prostatic urethra and membranous urethra; the former is a good term, as it implies that this portion of the canal is intimately connected with the prostate gland, but the latter is not so happily chosen. If, by the term, membranous portion of the urethra, it is intended to convey that some peculiar membrane is superadded to the mucous membrane of the urethra in this situation, the term is decidedly incorrect, for such is not the case; and if it is meant simply to express the mucous membrane of the urethra itself, there is no reason why every other part of the canal should not be called membranous as well as this. The fact is, that this portion of the urethra is not so intimately connected with the parts which surround it as either the prostatic or the spongy portions; it is here loosely connected to numerous veins of no inconsiderable size when injected, and some minute arterial ramifications, all enclosed in fine cellular tissue; next to these are the muscular fibres, which have received the name of *compressores urethræ*, from their action upon this part; and, also, a partial fibrous expansion derived from the triangular ligament as the canal passes through it.

From the loose relation these parts hold to the urethra, and in the absence of such compact structures as either prostate gland or corpus spongiosum, this part of the canal has more the appearance, when superficially examined, of being simply a membranous tube, and hence the term, which, from what I have stated, you can appreciate as being correct in a negative, not in a positive sense.

The continuation of the male urethra, from the termination of the membranous portion to its distal orifice, is surrounded by the vascular structure called corpus spongiosum; it is hence named the spongy portion of the urethra. This part of the canal is in close alliance with the two corpora cavernosa, which bodies, as you are aware, form the great bulk of the penis. In all the higher classes of animals the male is provided with an organ of excitement for the purpose of perfect fecundation. In these, impregnation takes place internally, and the shape and size of the organ present many varieties, depending upon the economy of the being. In some it is merely rudimentary, as in birds; in others, as in some reptiles, it is large, but formed solely of corpora cavernosa, which unite in such a manner as to leave a groove upon the under surface of the organ, along which the seminal secretion flows. The mammiferous animals, of all others, have the most complicated

sexual organs, and the males the most perfect organs of intromission. Here, as in man, the urethra takes the form of a tube, and is surrounded by the erectile tissue called corpus spongiosum. The necessity for all this complex organisation of the penis arises from the essential organs of generation of the female being placed within the pelvis, a situation they occupy to favor the process of utero-gestation.

That portion of the human male urethra, which acts the office of intromission, is not uniformly surrounded by its corpus spongiosum. At two situations this erectile structure undergoes remarkable developments; one of these is called the bulb of the urethra, the other is the glans penis; the intermediate portion of the canal is nearly equally surrounded by this structure; if it is thicker in one part of its circumference than another it is upon the under surface.

To the attainment of the object for which the spongy portion of the urethra is superadded to the prostatic and membranous parts of the canal, the two corpora cavernosa are provided. I shall here merely remark that these organs are composed of dense, highly elastic, fibrous sheaths, containing within them an arrangement of blood-vessels, which gives them the property of erection in a most remarkable degree; that these cylindrical tubes are attached by crura to the bones of the pelvis; that they unite, after a short course, to one another; and that the union takes place in such a manner as to leave a groove upon the upper and upon the lower surface of the body of the penis. In the lower groove is lodged that portion of the urethra which is called spongy; in the upper groove are placed the dorsal arteries of the penis, branches of the pudic nerve, absorbents, and the dorsal vein; or, as it is called, *par excellence*, the *vena magna ipsius penis*. The intromittent portion of the male organ of generation in the human subject, composed of these essential parts, is enveloped by a thin cellular covering derived from the superficial fascia of the abdomen, and, like other parts of the body which are constantly exposed to the atmosphere, is enveloped with the common tegumentary membrane, which is here of extreme delicacy, and possesses more than its ordinary elasticity. At the root of the organ some of that peculiar contractile tissue from the scrotum, called *dartos*, is expanded.

From what I have said already of the parts which surround the male urethra, you can readily understand what is meant by its prostatic, its membranous, and its spongy portions; the latter term being applied to that part of the canal, which is surrounded by the erectile tissue, called corpus spongiosum; and if to these we add its vesical or proximal, and its glandular or distal orifices, we shall be furnished with most of the anatomical distinctions which are of importance to bear in mind in speaking of the treatment of its diseases.

It is necessary, however, before I dismiss this part of the subject, that I should direct your attention to the inner surface of the urethra. Like all other mucous membranes in the body, the urethra presents an attached and a free surface; the former I have just somewhat fully enlarged upon.

The inner or free surface of the urethra is continuous at its proximal orifice with the mucous membrane of the bladder, and at its distal orifice with the tegu-

mentary covering of the glans penis. Between these two points it undergoes certain dilatations and contractions corresponding to the parts upon which it is, as it were, moulded, and along its course are found the orifices of excretory ducts and of mucous lacunæ.

Where the excretory ducts and the largest of the lacunæ open, the urethra is dilated; in the rest of its course it is of equal diameter, allowance being made for the differences I have mentioned as existing in its membranous and spongy portions.

From the vesical orifice the first deviation occurs where the membrane is in contact with the prostate gland. In this situation it is not only dilated but thrown into folds by the prominent mouth of a large lacuna placed upon its under surface, and called *caput gallinaginis*; the folds are moulded upon the prostate gland, so as to form two sinuses, into which the secretion of this organ is poured by several small ducts. In the immediate vicinity of this *caput gallinaginis*, and also upon the under surface of the urethra, the ducts common to the testes and vesiculæ seminales open.

The next dilatation the urethra undergoes is in that part which corresponds to the bulb of the corpus spongiosum, and here, as in the prostatic portion, the membrane forms a sinus. The excretory ducts of Cowper's glands open at this part and upon the under surface.

No further very remarkable dilatation of the canal takes place until it approaches its distal orifice, where it again forms a sinus, to which the name of fossa navicularis has been given. This is about an inch distant from the external orifice, and belongs rather to the upper than to the lower surface of the urethra.

I shall have constantly to refer to these sinuses under the names of *prostatic sinuses*, *sinus of the bulb*, and *fossa navicularis*.

At the commencement and termination of each of these sinuses, the urethra suffers a degree of contraction, and will frequently offer an opposition, more or less great, to the passage of an instrument along the canal. In one part, where the urethra passes through the triangular ligament, this is particularly the case, and here frequently much difficulty is experienced in overcoming the impediment. But upon all these points I shall again dwell when strictures of the urethra come to be considered.

You have observed me in this institution frequently to open the dorsal vein of the penis for the relief of the acute symptoms of gonorrhœa, and not unfrequently to get as much as seven or eight ounces of blood. I was led to this practice from observing the following interesting anatomical facts, which I take from my note-book for the medical session 1838-9:—

“For the purpose of making an injected preparation of the human penis, I introduced a probe into the dorsal vein of that organ, and forcibly broke through a valve. I next proceeded to distend the vessel with air, in a direction contrary to the course of the circulation, when I was surprised to find it escape at the distal orifice of the urethra. This circumstance induced me to inject warm water in the same direction, which, after the vein was distended, passed freely from the urethra externally. I next laid open the canal by dividing the under surface of the urethra with a pair of scissors, so as to leave the orifices of

the large lacunæ upon its upper surface uninjured. Upon injecting the water through the vein a second time, it flowed freely from the cut surfaces of the corpus spongiosum urethræ, and it trickled from the orifices of the lacunæ, especially from that of the *lacuna magna*. My next care was to throw in a fine injection, which pursued the course of the other fluids, escaping from the mouths of the lacunæ as before. The preparation was then dried and preserved." I should have mentioned, that before injecting the penis with wax, I inflated both corpora cavernosa with air, in the rough manner usually done in the dissecting-room.

Turning over in my mind the facts which this preparation demonstrated, I adopted the plan of taking blood from the penis by opening its dorsal vein, and with a success which has fully warranted me to persevere in this practice for more than three years. The communications which exist between the veins of the corpus spongiosum and the dorsal vein are very direct and numerous; and probably there is no part of the body where blood can be so speedily obtained from the direct seat of inflammation, by venesection, as in the urethra. Although the fluids which were injected in the preparation I have alluded to, and which is in our museum at the Westminster Hospital School of Medicine, escaped through the lacunæ of the urethra, yet I do not wish you to infer that any direct communication takes place in the natural state of the parts, between the radicles of the vein and the mucous follicles; in this case the membranes which separated them were doubtlessly torn through by the force of the air thrown into the vein in the first instance, but the fact clearly demonstrates how intimately connected the ducts and the blood-vessels are; and very probably when hæmorrhage occurs from the urethra, from acute inflammation, as it sometimes does in gonorrhœa, the blood escapes through the lacunæ, the membranes separating these ducts, and the veins being torn through in the first instance from the congestion of the blood-vessels.

Besides the *lacuna magna* in the *fossa navicularis* there are numerous other lacunæ, with the openings of which the free surface of the urethra is studded. The largest of these are always found to occupy the upper surface of the urethra, whilst the ducts of the prostate gland, those of the testicles, and seminal vesicles, and those of Cowper's glands, are placed upon its under surface—facts which are always borne in mind by the surgeon, when introducing instruments along the urethra. The mouths of all these openings are directed forward, or towards the distal orifice.

The length of the three divisions of the urethra is of some importance for you to bear in mind; and I may here state there is some discrepancy in your dissecting books upon this head. In the adult, where the prostatic gland is fully developed, the length of the prostatic portion of the urethra seldom exceeds an inch and a quarter; the membranous portion of the urethra is not so long, being in general not more than half an inch; and the remaining portion of the canal which is enclosed by the corpus spongiosum depends for its length upon the development of the penis, which scarcely, however, makes a difference in most instances of more than an inch in length. The dimensions and length of the prostatic and membranous

portions of the urethra are of more practical importance to be acquainted with than that of the spongy portion.

The *prepuce* affords one of the best examples in the body of the continuity of skin and mucous membrane, or rather of the insensible manner in which the one is gradually lost in the other. The fine, delicate skin which envelops the penis, extends for some length beyond the organ, and is reflected upon itself in such a manner as to form a covering for the glans penis. The mucous membrane of the urethra is continued from the external orifice over the surface of the glans, and at its base, or as it is called the *corona glandis*, it is continuous with the reflected layer of the prepuce.

In some individuals, the prepuce habitually is worn over the glans, and here its inner surface and the membrane covering the glans have all the characters of mucous membranes, and subject the individuals to balanitis, excoriations, phymosis, &c.; in others the surface of the glans is always denuded, and the prepuce thrown back; such individuals seldom are subjected to these annoying diseases, and the parts have all the characters of skin.

Gentlemen, the time I have taken up in speaking of the anatomy and functions of these parts forbids me to enter upon the subject of gonorrhœa until our next meeting. I shall not, however, offer you any apologies for having dwelt upon what I know some of you are already acquainted with; because, as I have said before, it is always necessary to have a clear understanding of the meaning of the anatomical terms by which we distinguish the various parts of an organ, previously to speaking of its diseases.

FRACTURE OF THE SKULL.—COMPRESSION OF THE BRAIN.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In a paper which I wrote on injuries of the head, in the ninth volume of the Transactions of the Provincial Medical and Surgical Association, I endeavoured to point out some characteristic signs whereby the surgeon can judge of the existence of fracture at the base of the skull. The first of the two cases I send you is a well-marked case of this description. The last case is one where symptoms of compression of the brain came on two days after an accident, without any previous indications of injury to the head, which symptoms rapidly gave way under the influence of mercury. If you consider these cases of sufficient importance, I shall be glad of their insertion in your Journal.

Your obedient servant,

Jan. 1843.

JOHN M. BANNER.

CASE I.—Joseph Bradbury, aged 26, was admitted into the Liverpool Northern Hospital on June 4, 1842.

History.—By trade he is an iron-founder, of very temperate habits. About an hour and a half before his admission into the hospital, he was struck senseless by a part of a large boiler falling and striking him the side of the head; he remained in a state of

insensibility for two or three minutes ; afterwards he was able to walk, supported by two men, suffering at intervals from vomiting.

Appearances and Symptoms.—There is a wound of the scalp eight inches long, extending from the centre of the right parietal bone to the nape of the neck ; the bone is deprived of its pericranium for an inch or more in extent ; there is neither fracture nor fissure observable at this part. There is a small wound on the left cheek. There is slight ecchymosis of the upper lids of both eyes, and also of the conjunctiva of the left eye. There is considerable hæmorrhage from the right ear, right nostril, and mouth, which has continued ever since the accident. The pupils are natural, and act freely on the admission of light ; the pulse is quick and weak, the surface cold, the countenance pale.

Treatment.—The edges of the wound were drawn together ; warmth was applied to the surface ; warm drink with small quantities of stimuli were given. An aperient in the morning.

5. He slept a little during the night ; complains of pain in the head ; he is dull and stupid, and requires an effort to arouse. The pulse is weak and quick ; the hæmorrhage has continued from the ear ; it is florid, and although less in quantity than yesterday, yet it is considerable ; that from the nose and mouth has ceased. The eyes are now completely surrounded by black rings of ecchymoses ; the lids are much swelled, and it is with difficulty that the eye can be seen ; the pupils act ; the conjunctivæ continue slightly ecchymosed ; the bowels have acted freely. Cold lotion to be applied to the head. Low diet.

6. He passed a better night. There is still a difficulty in making him understand the questions put to him, appearing disinclined to arouse ; the bleeding has continued from the ear ; it is of a paler color ; the eyelids are so much swollen that they cannot be separated ; he often asks for water ; the tongue is furred, but moist ; the pulse weak and quick ; the scalp is swelled ; the wound looks healthy ; bowels act freely. Calomel, two grains ; opium, half a grain ; every three hours.

9. The symptoms have continued, with slight alterations, up to this time ; the discharge continues from the ear ; it is a thin watery discharge tinged with blood ; the eyelids are painful and inflamed ; the ecchymosis is going off ; he is much more intelligent ; he states that the pain in the head is less ; he speaks very loud, and complains of a great noise in his head, like the strokes of an engine. The wound is healthy. Omit calomel and opium.

12. An abscess has formed in the left eye which was punctured ; the discharge from the right ear has become purulent, slightly tinged with blood. He continues to complain of the loud noises in the head. The mouth is very sore from the mercury. The wound is nearly healed ; the swelling of the eyelids is nearly gone ; the ecchymosis has quite disappeared ; and he expresses himself as " feeling more like himself and much better."

14. He complains this morning of great difficulty of vision with the right eye ; the pupil of this eye acts irregularly ; there is paralysis of the upper lid of the right eye, which was not observed before ; he cannot hear distinctly with the right ear, and has lost

the sense of smell ; the discharge of matter continues in considerable quantity from the ear ; the gums continue very sore ; he expresses a desire to leave his bed and to have better food ; he complains of the noise, but describes it as more like the sound of the bubbling of boiling water than anything else ; the wound is quite healed ; continues the low diet.

16. The symptoms continue the same as at the last report.

20. He complains of pain over the fore part of the head ; the pulse, which had come down to 80, was now at 106 ; the tongue is more furred, and dry in the centre. It appears that this man has had the half diet of the house for two days by mistake, which consists of some animal food. The discharge continues from the ear ; it is of a healthy character ; the paralysis continues much the same ; the hearing he thinks improved, and the sense of smell has slightly returned, and he fancies he can see objects more clearly with the right eye ; on holding up a finger, half a yard from the eye, he could not tell what object was held up. Twelve leeches to the temples ; half an ounce of castor oil at once. Diet as before.

21. The pain in the head and fever are quite relieved, and he appears as well as before the attack.

30. The discharge of matter continues from the ear ; it is of a healthy character ; he has lost the unpleasant sensation of sounds in the head ; the right pupil acts better ; the paralysis of the right lid continues the same ; he can distinguish objects at two yards off with the right eye ; he has the sense of smell stronger, being able now to distinguish strong odors.

July 5. He is improving each day ; the matter from the ear is diminishing in quantity ; the sight of the right eye is stronger, particularly when he first awakes in the morning ; the right pupil continues much more dilated than the left ; the paralysis of the lid is the same.

9. The discharge from the ear has quite ceased, and, with the exception of the paralysis of the eyelid, he is in every respect better. Allowed to sit up, and to have half diet.

16. He left the hospital at his own request, at which time the sight of the right eye was much improved. He was able to distinguish objects at the further side of the ward in which he slept ; the hearing was restored, and he was in every respect very much better.

I saw this man a few weeks after he left the hospital ; he was quite well, with the exception of the paralysis of the lid, which was much better.

CASE II.—William Cain, aged twenty-seven, was admitted on the 17th of February, 1842, into hospital, with dislocation of the head of the femur into the sacro-ischiatic notch. The dislocation was well marked, and was easily reduced by the use of the pullies. The patient had fallen into the hold of a ship, and when brought into the hospital was faint ; advantage was taken of this state, and rendered the reduction comparatively easy. He was perfectly sensible, complaining of cold, and a desire for bed ; the surface was cold ; he did not complain of any other injury.

18. He has passed a good night, and expresses himself as feeling no other than slight pain in the

hip, and soreness about the body. The bowels have acted; the pulse is 80; tongue slightly furred.

20. This morning Mr. Parker, the house-surgeon, found the patient with symptoms of coma; it was with difficulty he could be roused, breathing heavily, with slow pulse. In consequence of these appearances we had the head shaved, and made a careful examination; a small tumor of effused blood was found over the left temple; slight ecchymosis was observed over the upper and lower eyelids of the left side; there was also a small spot on the conjunctiva of the left eye; there is paralysis of the left side of the face. On pressing the tumor over the temple, he shows from his movements that it gives pain; on speaking loudly and shaking him, he answers in monosyllables; the pupils are dilated; they act slightly. Cold lotion was ordered to the head; turpentine enemata were ordered, and three grains of calomel, with one and a half of opium every two hours.

21. The symptoms continue without any alteration; the bowels have been freely opened; the symptoms of coma are not increased.

22. The gums are affected by the mercury; the symptoms of compression are not increasing. Omit the calomel.

It is unnecessary to give the daily symptoms in this case; suffice it to say, that there was a rapid improvement manifested each day, and at the expiration of fourteen days from the attack the symptoms entirely disappeared, the patient continuing well under the influence of mercury the whole time.

HYDATIDS OF THE UTERUS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I consider that every medical man ought, as far as he can, make known to his medical brethren any case of practical value that may come under his observation, and more especially that every member of the Provincial Medical and Surgical Association should publish such in your excellent Journal. This being my opinion, I send you the following case of hydatids of the uterus, which, if you consider of sufficient interest, shall be obliged by your insertion of it in the Journal:—

On the 8th of December last I was sent for, about three, a.m., to attend Mrs. H., of this place, then in labor. On my arrival I found the presentation natural, and delivery took place in about an hour; in fact, the labor was a common-place one, and the patient went on well till the 20th, when her husband came in a great hurry, desiring me to see his wife immediately, as he was afraid she was dying. I hastened to her house, and found her in a state of syncope. Profuse hæmorrhage had taken place, and was still continuing; two chamber utensils had been emptied prior to my arrival; the one I saw was more than half full, and the bed-clothes were saturated with blood. I immediately ordered cloths wet with vinegar and water to be applied over the abdomen, loins, thighs, &c., while I went for some ammonia and opium, which might have taken me about ten minutes. On my return I found that the hæmorrhage had entirely ceased, and on giving her the stimulant she rallied.

I now made inquiries into the particulars of the case. It appeared that she got out of bed in the morning, and on returning found something running away from her, and directly she felt a substance come away, which, on examination, I found to be a mass of hydatids. I cannot describe the size better than in the words of a woman present—"Why, Sir, it is as large as a child's head." I called again in the course of the day, and found there had been no return of the hæmorrhage, and in a few days the patient was down stairs quite recovered, except being weak from the great loss of blood.

I beg to remark two circumstances in this case which I consider rather extraordinary; first, the manner in which the hydatids came off (I cannot say expelled), for it appears there was no uterine contraction; it must have been from their own weight; secondly, the sudden stoppage of the hæmorrhage, for, after the cold application, there was not sufficient to stain a napkin.

I am, Gentlemen,
Your obedient servant,
F. A. CLEWE.

Bradninch, Jan. 14, 1843.

REMARKS ON CHOLERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The subject which now claims attention is the state of the circulation in cholera, and it may be very advantageously divided into two heads—viz., the action of the organs by which the circulation is carried on, and the condition of the circulating fluid.

1st. Of the action of the heart and arteries. From what has been already said, it will be inferred that the heart and arteries are impaired in action, whether the force or frequency of their contractions be regarded, and in this respect correspond most remarkably with the respiration. From what was stated in a former letter, it might be supposed that this state of the circulation was to be imputed solely to the imperfectly oxygenated blood supplied to the heart, owing to the defective action of the lungs; but in cholera other circumstances exist, the tendency of which is to prohibit such an exclusive explanation. No fact in physiology or pathology is better known, or more easy of demonstration, than the mutual dependence on each other of the respiratory and circulatory systems—in other words, the normal action of the lungs is essential to healthy circulation, and so is a healthy condition of the latter to the function of respiration. Hence it is, that where the heart is diseased the respiratory system is sooner or later a participator; and where the function of respiration is materially disordered, such derangement almost immediately implicates the circulation. In such cases, however, one system is unequivocally affected in consequence of the deranged state of the other; and whilst the action of the one is increased that of the other may be absolutely diminished, and *vice versa*—in fact they may be regarded simply as cause and effect. What, then, it may be asked, is the peculiarity connected with these systems in cholera? Is it that, so far as my observation extends, the most perfect correspondence between the

respiration and circulation exists. Thus, the respiration is slow, feeble, and scarcely perceptible, so is the pulse at the wrist, and, what is more, so is the action of the heart itself. This harmony between the pulse at the wrist and the action of the heart I consider as deserving of especial remark, and in corroboration of its existence may state that, in several instances I have proved it by listening to the contractions of the heart, whilst my fingers were applied to the pulse at the wrist. The invariable result of such examination was the conviction, not only of the contractions of the heart and vessels being synchronous, but also similar in force. The pathological inference which I would draw from the above fact is, that the heart and lungs, being mainly influenced by the same system of nerves, are, in cholera, simultaneously involved, the morbid impression, whatever it may be, being made on such part of the nervous system. This, however, must form the subject of future examination. In the meanwhile, I cannot refrain from expressing my opinion, that the heart is much more dependent than would appear from the experiments of the highest physiological writers on nervous influence. This opinion is based upon the observation of diseases both of the circulating and cerebral organs; and one very powerful objection may be urged against the conclusions drawn from experiments made upon living animals—viz., the shock which the economy suffers from the very performance of such operations. As this part of my subject will be necessarily reverted to in connection with the nervous system, I shall now pass on to the consideration thereof.

2ndly, The condition of the blood. This is, as already stated, manifestly changed, whether it be merely regarded physically, or subjected to the test of chemical analysis. The general physical change may be stated to consist in the dark tarry appearance which it exhibits when drawn from a vein during life, the tardy manner in which it flows even from the largest orifice, owing to its diminished fluidity, and the very small proportion of serum which is separated when the abstracted blood has been allowed to cool and coagulate, and which deficiency of serum obviously arises from the large quantity poured off by the alvine discharges, and which effect cannot, in my opinion, be attributed to mere increased secretion from the mucous surface of the alimentary canal. In support of this opinion, it may not be irrelevant to observe that, although an increased quantity of mucus is really discharged, such increase bears no proportion to the immense quantity of serum and water met with in the evacuated matters. This appears to be the proper place to mention another observation, which I have repeatedly made, and which remarkably confirms the above statement—viz., that when the blood abstracted is received into a succession of teacups, say to the extent of from three to four ounces in each, the change, both in color and constitution, was striking. The blood, which at first scarcely trickled over the arm, where heat was used by wet cloths until actual vesication took place, gradually flowed more freely, and altered its color from black to a healthy appearance, and at last assumed almost an arterial hue; when allowed to cool, the first cupful drawn (about four ounces in quantity) did not show more than a drachm or drachm and a half of serum; in each successive cup the quantity of serum

was increased, until in the last it fully equalled that of healthy blood. The case from which the above statement is taken will, with others, be adverted to more particularly in connection with the treatment of the disease.

As to the chemical analysis of the blood in cholera I have little to say, never having myself conducted such an investigation; but this is matter of small import when I have it in my power to appeal to the able analyses of Dr. O'Shaughnessy and many others for the truth of my former statement, to the effect that chemical analysis had fully confirmed what was to be rationally anticipated from physical observation—viz., that the soluble, saline, and aqueous components of the blood have invariably been found defective. I abstain from dilating upon this most interesting and important part of my subject, having hitherto rigidly adhered to the determination to occupy your pages with nothing which had not been deduced from actual personal observation.

Enough has now been said to establish the fact that, from the deranged state of respiration and circulation, the fluid which ought to supply increased vigor to the whole of the organs to which it is distributed, and on the due performance of the functions of which life itself depends, is actually so changed from its healthy state as to assume the character of a poison, and to exert its influence as such, more especially on the brain itself, and that this alone might suffice to account for many of the phenomena of cholera, to which end the suppositions of the advocates of the inflammatory, congestive, or febrile views of the pathology of the disease are quite inadequate. But it may be added that this unequivocal change in the blood itself appears to be the consequence only of some very powerful cause which yet requires explanation; such, it is my firm belief, is to be looked for in the nervous system. In the above opinion I am strengthened by the fact, that morbid anatomy has thrown no light whatever upon the nature of cholera, however fearfully it may have demonstrated its effects.

I am, Gentlemen,

Your obedient servant,

GEORGE FIFE, M.D.

Newcastle-upon-Tyne, Jan. 13, 1843.

ILLUSTRATIONS OF THE WATER CURE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In fulfilment of my expressed intention of forwarding you occasional illustrations of the water cure, I send you the accompanying case, reported by Mr. Cole, house-surgeon of the Worcester Infirmary.

Yours, faithfully,

CHARLES HASTINGS, M.D.

Worcester, Jan. 16, 1843.

CASE.—John Mills, aged twenty-seven, admitted 23rd September, 1842, with a large abscess under the integuments of right thigh, supposed to proceed from disease of hip-joint. Was formerly a patient in the infirmary, under Dr. Hastings, suffering from lumbago, &c.; was discharged some months since much relieved. He attributes his present disease to cold caught six

weeks previously to his admission by lying on damp grass; but it appears upon inquiry, that shortly after his leaving the infirmary he began to experience a fixed pain in his right hip and knee; he had also occasional pain in the left lower extremity, particularly during the night. Six weeks ago he perceived a swelling over the right hip and the upper part of the thigh, which at the time he ascribed to a fall from his horse some years ago upon that side, but at which time he suffered no inconvenience excepting that arising from the contusion. Soon afterwards he placed himself under the care of Dr. Wilson, at Malvern, who expressed an opinion that he could cure him. He was in lodgings with three others undergoing the water cure. At this time the pain was entirely confined to the hip and right thigh, excepting on exposure to cold.

Dr. Wilson commenced his treatment by having him wrapped closely in a blanket, over which were placed two or three more, then a coverlet, and lastly a feather bed. In this state he lay two hours and a half, till a profuse perspiration was produced; he was then removed, and wrapped in a sheet dipped in cold water, and friction applied over every part of the body for some minutes, without removing the sheet. A dry sheet was then substituted, and the body rubbed again; after which he was directed to dress, and walk till he was tired.

This treatment was continued daily for three weeks, and during this time no medicines were administered. The diet consisted of bread and butter, with tea and milk for breakfast and supper, and rice for dinner, excepting towards the latter part of his treatment, when a little mutton was allowed. At this time the general pains were relieved, but the right hip was increasing in size. After three weeks the sweatings and rubbings were discontinued, the hip was washed every morning for an hour with warm water, and linen dipped in cold water was bound round it and kept wet night and day. He was now not allowed to walk about. This was persevered in for a week, but the hip continuing to enlarge, he left Malvern, and came into the infirmary.

30. The patient has been in a week; he complains now only of pain in the hip, &c., which is much enlarged with evident fluctuation.

Oct. 20. Two large formations of pus have been evacuated by the lancet; the swelling is now much diminished; he has no hectic fever. Treatment: Tonics, good diet, and rest.

Notwithstanding these favourable appearances, the discharge of purulent matter from the fore part of the thigh continued, and another abscess connected with the internal abdominal muscles showed itself. The man at length sunk, and on examination after death it was found that the abscess, which pointed in the front of the thigh when he was admitted, communicated with the hip joint. The cartilages of the articulating surfaces were abraded, and the psoas abscess had made its way between the triceps and bone, and pointed at the back of the thigh.

The man stated to me, two days before his death, that before he came into the infirmary the last time, he had been under Mr. Wilson, the water doctor, at Malvern; that he was under his treatment for eight weeks; and that he had the wet sheet and cold baths

after; and that he went to bed every night by his orders with a wet cloth around the bowels and upper parts of hips.

Herbert Cole, House Surgeon.

Worcester Infirmary, Jan. 7, 1843.

* * * We shall take an early opportunity of making some remarks on the water cure, as practised by Priessnitz and his followers.—Eds.

CASE OF CÆSAREAN OPERATION.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Should the following particulars of a Cæsarean operation, performed in March last (although unsuccessfully), be sufficiently interesting, I shall feel glad by your inserting them in the Provincial Medical Journal.

I am, Gentlemen,

Yours obediently,

SAMUEL H. WRAITH, Surgeon.

Darwen, Lancashire, Jan. 12, 1843.

Mary Jepson, aged forty-three, had been married twenty years; before marriage she was a woman of loose character; after marriage she wove for her livelihood, and this generally in a damp cellar; in 1831 she was confined of a son, and during her pregnancy she complained of a pain in her back, but for which she sought no medical advice; the labor was by no means difficult. In 1834 she was again confined; the "pain" in her back still continued, and a little deformity was now perceptible; the labor was more tedious than the former, but was accomplished without instrumental aid. After this delivery, she complained very much of her back, and the spine was visibly giving way; this continued to increase, so much so that in six months from the period of her delivery she was obliged to use crutches; still she had had no medical advice.

In 1839 she was again confined, and the deformity was so great that Mr. Gaultier, her medical attendant, thought it advisable to perform the Cæsarean operation, and on this account he called in Dr. Maitland, of Blackburn, who recommended that embryotomy should be performed, which was with great difficulty accomplished. From this time she gradually grew worse, and she was informed that should she ever again become pregnant to apply to her medical adviser; this, however, she neglected to do, and on the 8th of March, 1842, I was requested to attend her in labor. On my arrival, I found that the full period of utero-gestation had expired, but the pains were not severe. On making an examination, *per vaginam*, I calculated the diameter at the brim to be one inch and a half in the conjugate, by two inches and a half in the iliac diameter; I, therefore, at once concluded, in my own mind that the Cæsarean operation would be requisite. I now prepared the mind of my patient for an operation; this did not at all surprise her, although she would not consent. I now sent to Blackburn (four miles) for my friends, Dr. Durie and Messrs. Bailey and Morley, who arrived here about seven, p.m. After a careful examination they perfectly coincided with me, that the Cæsarean operation was requisite. The action of the uterus was now very severe, but the

patient's and her husband's sanction for the operation could not be obtained until ten, p.m., at which time she felt very much exhausted; on this account we thought there was only the shadow of a hope for her life, and consequently urged it more, especially for the sake of the child, although she had not felt it move for twelve hours.

A little after ten, p.m., I commenced the operation, the patient lying on her back in bed, with her head and shoulders elevated with pillows; and the bladder and rectum being previously emptied, I commenced by making an incision from the umbilicus to the symphysis pubis and a little to the right of the linea alba; this incision to a small extent exposed the uterus, the abdominal parietes being very thin; the uterus being fully exposed by enlarging the incision divided by the fingers, upwards and downwards, was then cautiously opened in a similar manner to the extent of about five inches. There was now much hæmorrhage and the pulse scarcely perceptible (brandy diluted was now administered). The hand was then introduced and the child and placenta extracted as speedily as possible; the child, however, was dead. The uterus was but slightly contracted, and the hæmorrhage continued, but in much less quantity. Three sutures were now inserted in the external wound, which was afterwards simply dressed with adhesive plaster; a pad was then applied over the uterus and a bandage placed round her, so as to cause firm pressure over the uterus. From this time she gradually sank, and died from internal hæmorrhage at two, a.m., having survived the operation about three hours. I felt sorry the husband would not permit a post-mortem examination.

ON THE TREATMENT OF HOOPING-COUGH BY COCHINEAL.

By Dr. C. WACHTL, Vienna.

Every medical man is aware of the obstinate nature of hooping-cough, and that, in spite of the various means employed in its treatment, it will persist, with little or no change, for four to six weeks. During the last few months I have had an opportunity of trying cochineal (a notice of which I first saw in the English "Courier") in nine cases of hooping-cough, and I have found the results to be so favorable that I would earnestly entreat my brethren to give it a trial in this disease.

Hooping-cough, as is well known, may be distinguished into two periods, the catarrhal and the spasmodic, and a different mode of treatment is required for each; but I have found the remedy just mentioned highly useful in both.

CASE I.—The first trial was made on a boy, ten years of age; the disease was drawing near to its close, and he had only four or five accesses of cough during the day. He was ordered to have a teaspoonful of the following mixture in the evening:—Cochineal, ten grains; bitartrate of potass, twenty grains; sugar, one ounce; water, six ounces. On the next day the child had only two fits of coughing, and on the third was perfectly well.

CASE II.—A girl, eight years of age, had suffered from hooping-cough during eleven weeks, three years

previously at Dresden. In the winter of 1840 she was again attacked, and the disease yielded in about four weeks under the usual remedies. Last winter I was again called to see this child, and to my surprise found her laboring under hooping-cough for the third time, and in a very severe degree. The child was of scrofulous constitution, and very weak; the face and lower extremities were œdematous, the respiration very much accelerated, and the febrile symptoms running high. The expectorated matter was streaked with blood, and the number of fits amounted to more than sixty in the twenty-four hours. The most powerful remedies were given without any benefit. I therefore determined on trying the cochineal again; its use was followed by the best results. After the fifth day the number of accesses of coughing was reduced to two or three, and the child was perfectly well on the eleventh day. It is worthy of remark that the grandmother of this child, who slept in the same bed with her, was seized with the disease; but the remedy had no effect whatever on it.

CASES III., IV., V.—Three strong, healthy children, of two, five, and eleven years, had labored under the disease during fourteen days; various remedies had been employed, first by the parents and afterwards by a medical man, without any effect. The cochineal was now administered, and they were all well in seven days.

CASE VI.—Mary B., a girl three years and a half old, of scrofulous habit, was attacked by hooping cough. Three or four doses of the remedy were given without effect; on the contrary, the pulse and respiration were more accelerated; the child complained of darting pain over the sternum and in the region of the false ribs, on the left side. The use of the cochineal mixture was therefore suspended, and some calomel, with an oleaginous mixture containing nitre, ordered in its stead. The unfavorable symptoms subsided in about twenty-four hours, but the accesses of cough amounted to more than twenty during the day. The use of the warm cochineal mixture was now resumed, the number and intensity of the accesses quickly diminished, and the disease had completely disappeared in eight days.

CASE VII.—The infant (four months old) of an English engineer was attacked by the disease; after the third or fourth dose of the medicine considerable improvement took place, and the parents were enabled to continue their voyage on the second day.

CASE VIII.—The subject of this case was ten months old; the father described her as laboring under a spasmodic cough, having two fits during the day and four at night. As the case was somewhat doubtful, I ordered some insignificant medicine; on the following day, however, I saw the child during a fit, and ascertained that the disease was hooping-cough. The child had had nine fits since the previous day. The cochineal mixture was now given; in the next twenty-four hours the number of fits diminished to five; on the fourth day to two; and on the fifth day the child was quite well.

CASE IX.—A weakly, scrofulous child, eight years old (who had previously suffered from chronic cough when three years of age), was attacked by hooping-cough. Various remedies were tried without effect, and when I saw him, on the 8th of June, I found him

sitting up in bed; the face was œdematous, the pulse quick, and the respiration greatly accelerated; the child complained of oppression on the chest and pain in the abdomen. The fits of coughing were innumerable, with frequent bleeding from the nose and mouth. I ordered a laxative enema, and a teaspoonful of the cochineal mixture every three hours. I also desired the child's father to reckon the number of fits carefully. No less than eighty-one fits occurred during the twenty-four hours, and of these twenty-three were attended with vomiting, and the discharge of blood from the mouth.

On the second day the number of accesses fell to sixty-five; the vomiting was less frequent, but the hæmorrhage increased. On the third day no change worthy of notice occurred; on the fourth the fits diminished to forty; and from this time they gradually declined to the ninth day, when they were twenty-one. The pain in the chest had now disappeared, but it was impossible to induce the child to take the medicine any longer.

With regard to the mode of administration of this remedy, a few remarks are necessary. From the tendency of the cochineal to become putrid, no more should be dissolved than is required for thirty-six to forty-eight hours. After a few days, and especially when the bottle has been frequently opened, the color becomes changed, and a sour smell is perceived. Cochineal is not dissolved by cold water; a warm solution is, therefore, required, and the color of this is clear red; the tint is deeper when a portion of the bitartrate of potass is added to the solution; I have no experience to determine how far the addition of this salt may influence the action of the remedy.

In conclusion, I may remark, that many of my colleagues have employed the cochineal mixture with the best effects in cases of whooping-cough; and Dr. Weinke has remarked, that it is very efficacious in the cough which so frequently accompanies measles.—*Med. Jahrbücher*, October, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JANUARY 21, 1843.

"Raro antecedentem scelestum
Deseruit pede, pœna, clauso."

The office of critic is in truth an ungracious and unprofitable one. If you adhere to the "medio tutissimus" of the poet, you are set down as an insipid and insignificant quill-driver. If you praise the production of rising talent or pay a just tribute to long established reputation, you are a slave and a sycophant—unjust and partial—cut by one friend for not laying it on sufficiently thick and abused by the rest of the "genus" for your charitable desire to conceal their infirmities. On the other hand, you may as well declare yourself "non compos" and walk straight to St. Luke's as attempt to exercise the ancient privilege of the critic in an independent manner. A modern author has as little idea of submitting to the rod as a li-

berated black. If you expose a single delinquency or pluck a single feather from a self-decorated bird, the whole rookery is in commotion and you are hunted, with a kettle to your tail or a wisp of straw on your horn, beyond the pale of civilised life.

Fully sensible of the force of the proverb, "give a dog a bad name," &c.—and abhorring the olden cry, "fenum habet in cornu," we are ever unwilling to awaken the susceptibilities of the "irritable race," and have shut our eyes on many a literary offence of foul origin. But we are not permitted to exercise our little brief authority after our own fashion. Readers, now a days, have become almost as irritable as writers, and if they suspect any laxity of critical virtue, hesitate not to fall upon the backsliding reviewer, or to accuse him by innuendo of ignorance and incompetency.

The preceding reflections have been suggested by a letter recently received from Norwich, and which we would gladly have consigned to the flames without publication, were it not from fear of our correspondent's wrath, and because its perusal has excited a portion of our long dormant indignation. Here is the epistle—

"Norwich, Jan. 13, 1843.

To the Editors of the Provincial Medical Journal.

Gentlemen,—Having seen in your Journal a very favorable notice of a work by Dr. Burgess on Diseases of the Skin, I was induced to purchase the same. A few days afterwards I lent the book to a friend, who brought it back to me and said that it was exactly the same as a "Compendium of the Diseases of the Skin," published several years back by Dr. Jonathan Green, of London. On looking over the two works I was struck with the singular degree of similarity between them, and, as we are unable to account for it, my friend and myself beg that you will let us know whether MM. Cazenave and Schedel borrowed from Dr. Jonathan or Dr. Jonathan from them.

Your obedient servant,
F. P."

There is no escaping from the question thus plainly put by our correspondent; and we feel compelled to answer it, although our answer disclose one of the most extraordinary examples of plagiarism that has, perhaps, ever occurred in the history of medical literature. The compendium of Dr. Jonathan Green, published as an *original* work, dedicated to Sir Henry Hallford and highly lauded by every section of the medical press, is a *mere translation from beginning to end* of the "Abrégé Practique des Maladies de la Peau," by MM. Cazenave and Schedel. A few original cases, it is true, have been added by Dr. Green, and here and there, at the commencement of a chapter, we find a few lines of introductory matter; but with these exceptions, the whole work, from beginning to end—the arrangement of cutaneous diseases—the description of symptoms and treatment—the order of the several chapters—and the well-known essay on the

syphilides—the *whole*, we repeat, is a mere translation of the work of M. Cazenave.

How any man pretending to a literary reputation, or to reputation of any kind, could have been guilty of such wholesale appropriation of another's goods, we cannot pretend to divine, nor explain how this transaction hitherto escaped the notice of our brother critics. It is, in truth, curious to see how the borrowed experience of Dr. Green was lauded in the "Edinburgh Journal," the "Medico-Chirurgical Review," the "Medical Gazette," the "Lancet," and in other excellent and well-conducted reviews. The editor of the "British Review" informs us that "Dr. Green's work is complete and worthy of its author's good reputation."

Dr. Johnson affirms that "Dr. Green's Observations on impetigo and porrigo are certainly the most judicious we have ever read; they are derived from sound pathological views."

Even the learned and acute Dr. Willis was deceived, notwithstanding his special knowledge of the literature of cutaneous diseases. In a note to his translation of Rayer, Dr. Willis says, "There is another work published in England so recently, that Dr. Rayer could not be aware of its existence. As a manual it is every way superior to the synopsis of Bateman, and has the advantage over the *abregé pratique*, in having been written by an individual intimately acquainted with the subject; this is a practical compendium of the diseases of the skin, by Jonathan Green, M.D., 1835."

In truth, this is too bad. So a man's brains may be picked out in Paris, and dressed up by an English cook, and we are to believe not only that the said brains are much better than when in their original skull, but that the thief is "an individual intimately acquainted with the subject."

THE MEDICAL CHARITIES' BILL.

We feel sincere pleasure in announcing that this obnoxious bill has been abandoned by the Irish government. The bill "for the better regulation of the Irish medical charities" will not be introduced during the present session of Parliament, at least, under the auspices of Lord Eliot and with the support of the government.

At the weekly meeting of the guardians of the South Dublin Union, held on January 12, Mr. Hall, an assistant-commissioner, announced "that it was not the intention of the government to introduce, in the course of the approaching session, any legislative enactment whatever, having reference to the medical charities of Ireland. The government were fully cognizant of the fact, that a very great disparity of opinion existed upon this subject in Ireland, and they did not consider that the question was one which required

to be disposed of in a very summary and expeditious manner. In conclusion, he would only add that the decision of the government not to take any steps in the matter, during the approaching session, met with the warmest accordance of the poor-law commissioners. Nothing could be more agreeable to their wishes."

This, it must be confessed, is a very handsome and honorable capitulation. Nothing more agreeable to *their* wishes! Nor to *ours*, also. We fear, however, that this sudden conversion bodes no good, and we trust that the friends of our professional independence in Ireland will not allow their vigilance to relax. It is clear that the commissioners have yielded before the noble and determined expression of feeling put forth by the united profession of Ireland. There was "no very great disparity of opinion on the subject," as Mr. Hall pretends; for it is notorious that, with *three or four* exceptions, the medical profession of Ireland resisted to a man the attempt of the poor-law commissioners to destroy their independence and bring them under a detested and degrading yoke. As long as any hope remained, through corruption or intimidation, of exciting discord or creating division amongst the ranks of the profession, the commissioners persevered in their plan, and they only retired from the field when a declaration "against the proposal of placing the medical charities of Ireland under the control of the poor-law commissioners" had been signed by almost every dispensary medical officer in the kingdom:

Great, indeed, must have been the sense of wrong and the apprehension of evil, when nearly *one thousand* medical men were found to subscribe a declaration of principle within the space of a few weeks.

REVIEWS.

Methodus Medendi; or, the Description and Treatment of the Principal Diseases incident to the Human Frame. By HENRY M'CORMAC, M.D., Consulting Physician to the Belfast Hospital, and Professor of the Theory and Practice of Medicine in the Royal Belfast Institution. London: 8vo. pp. 574.

In a brief preface, consisting of four very short paragraphs, Dr. M'Cormac announces the plan of his work, and the principles that have guided him in its composition, stating that his object has been, by embodying a considerable amount of new and interesting matter from British and foreign authors and his own experience, to supply the want created (notwithstanding the number and excellence of the treatises on the practice of physic) by the constant progress of medical science, and expressing a hope that, in accomplishing his task, he has condensed much useful information, and conveyed it in "language at once perspicuous and precise."

There is certainly in the present day no dearth of medical authors; yet, amidst the heaps of medical

books loading the shelves of booksellers and the tables of reviewers, there are few claiming to be more than mere compilations. Indeed, were some of the distinguished writers of the last century restored to life, they would be struck with amazement at the number of authors who now base their literary fame on arranging, clipping, or compounding the works of others. Nevertheless, some of these productions are useful to students or even to practitioners; for it requires a certain degree of judgment, tact, and knowledge to compose respectable treatises of this description, and considerable merit is due to the authors of such.

The programme of Dr. M'Cormac enumerates all the characteristics of a good elementary work on the practice of medicine, from which nothing more can possibly be expected than full directions for the diagnosis and treatment of disease, a correct account of morbid changes of structure, and brevity combined with clearness. Let us then proceed to ascertain how far Dr. M'Cormac has succeeded in carrying his intentions into execution, and this we can best do by quoting a few passages at random from his book.

At page 1, having described the symptoms of the second stage of fever, he employs the following vaguely expressed sentence:—"Now, or earlier, one or both parotids inflame, and perhaps suppurate; at the same time some of the more important viscera may be implicated." Now we fancy even the author himself will acknowledge that the student would be led by this passage to believe that parotiditis is a very frequent, if not ordinary, complication of fever in its more advanced stages.

In a subsequent page of the chapter, entitled "Fever, Typhus," Dr. M'Cormac expresses the most decided hostility to the humoral pathology; in his opinion, "to look on it as affording an explanation of fever would only be to plunge into exploded futilities;" and this anathema is hurled against the humorists, whilst a little further on he touches (although it be without sufficient minuteness and clearness) on the predisposition to fever, caused by insufficient or unwholesome food; on the production of fever by morbid poisons, generated by the crowding of people into a limited space, and on its origin from putrid effluvia, placing in close juxtaposition with this part of the chapter a paraphrase of the eloquent and often quoted summary of Dr. G. Fordyce *—"Fever is a disease which affects the whole system; it affects the head, the trunk of the body, and the extremities; it affects the circulation, the absorption, and the nervous system; it affects the skin, the muscular fibres, and the membranes; it affects the body, and, likewise, the mind: it is, therefore, in every sense a disease of the whole system." A writer purporting to give a condensed view of medicine, with all the modern discoveries, should not be unaware that in the opinion of the best physicians of the present day, the principles of the old humorists have been too indiscriminately condemned and unjustly consigned to oblivion, and that in a modified form the notions of the humorists have been revived by many distinguished men, who

have shown how, with the aid of chemistry, and the application of that science to the detection of the condition of the blood and secretions in health and disease, a modified humoral pathology may contribute information for the purposes of diagnosis and treatment, as well as throw light on the causes of disease. Without, however, entering into a subject so extensive and interesting, we may observe, that the author's opinion is contradicted by the emphatic *resumé* we have alluded to, when it is considered beside the unquestioned and well understood facts regarding the action of morbid poisons emanating from an individual affected with fever, or produced by the effluvia of crowded prisons or putrescent animal and vegetable substances. Morbid poisons of this kind being conveyed, through the medium of the atmosphere, to the pulmonary, buccal, and nasal mucous membranes, must be supposed in the first instance to be absorbed, and, entering the circulation, to produce changes in the blood, which, being carried into the remotest parts of the frame, comes in contact with every nerve of the body, and produces those reflex actions, which, manifesting themselves in symptoms referable to every organ, furnish ample grounds for saying that fever is in every sense a disease of the whole system. Were this infection of the blood denied, one must suppose that the nervous impression lighting up fever is limited to the nerves of the mucous membrane of the lungs, mouth, and nares; impressions so limited might give rise to reflex action, but not to reflex action so diffused and universal. Nor can it be said that the morbid state of the blood exists only temporarily at the commencement of fever, when that fluid is the medium of carrying along to the various nerves and arteries the poison, which is quickly got rid of when it has stimulated the nerves, and laid the foundation of morbid action of long duration. To entertain such a notion as this would be as absurd as to suppose it possible that, in simple inflammation of a severe character, the symptomatic fever should continue for weeks after the complete disappearance of the local affection. It is evident, then, without seeking data beyond the work before us, that the state of the blood has so much to do with the production and maintenance of the phenomena of fever, as to render quite untenable the despotic and unsupported denunciation of the author against the humoral views of our time, modified and purified as these are by the advance of physiology, the application of chemistry to the phenomena of health and disease, and finally, by the inductive method of reasoning.

In page 8 of the same chapter may be found the following strange sentence:—"Inflammation, far from unavoidable, often complicates fever."

Dr. M'Cormac delights in using words of his own coinage, and often employs terms from the dead or modern languages, even when his meaning can be perfectly well expressed without going beyond plain English; indeed, he very frequently goes still farther in the march of pedantry, quoting Greek, Latin, or German, most unnecessarily—nay, often expressing the same sentence in two or three languages—faults

* Dissertations on Fever, No. 1, p. 28.

always deserving of censure, but especially in a work like his, where the field is so immense, and the materials are collected from a vast number of volumes; in such a book, to practice this pedantry is to exclude some practically important matter. Dr. M'Cormac's preface shows he is fully aware of this, but his desire to display his powers as a linguist is too strong, and carries him away. Thus, at page 14, we read, "In temperate climates famine is the invariable precursor of epidemic fever, λοιμός μετα λιμόν." At page 31 we find the following erudite passage:—"When tertian continues for some time, the attacks, up to a certain point, become progressively aggravated, after which they decline: *primo paroxysmi febriles mitiores ut plurimum observantur, sed vires acquirunt eundo*, says Lieutaud, an observation the truth of which I have verified in my own person. The condition of the spleen and liver must always be adverted to, for, as Klein remarks, *breves et securæ esse solent febres intermittentes in εσπλανγχνης et contra*. Quartan, not to mention Quintan, is the most obstinate but least dangerous of the periodics. *Febre cartana n'a jamai fa suona campano*, says the Provencal proverb; to which may be added from Celsus, *Nam quartana neminem jugulat*." Again, in the chapter on yellow fever, we find this repetition of the same words in English and Greek,—"*Hippocrates speaks of the passage of black bile or blood, χολη μελαινα, αιμα μελαν*." Again, we find the same display and waste of space in the chapter on measles; for instance, the following: "The eyelids are swollen, so that Heberden has seen the patient unable to raise them: *interdum palpebræ adeo intumuerunt, ut per horas quatuor et viginti aperiri non potuerint*." Then, at page 276, we read, "The free or large extremity, as Rudolphi observes, is spinal in the male, straight in the female, *corpore maris spiralliter involuto, femina subrecto*. Not unfrequently quotations of considerable length from the Latin, Greek, German, Italian, or French, are met with, unaccompanied by a translation, and sometimes one foreign language is by no means sufficient to invest a sentence, as it were, with a costume of profound learning; thus, at page 247, we read, "The student's motto should be *σπουδὴ βραδεία, festina lente*—the *ohne hast aber ohne rast* of the illustrious Goethe," and we can hardly help wondering the author's extensive knowledge of divers tongues did not lead him to express the motto in all languages, dead and living! This *linguo-mania* savours at once of vanity and literary vulgarity; it might be overlooked in those very amusing and now almost extinct individuals, the hedge-schoolmasters of Ireland, but is unpardonable in the work of a physician and professor, the more especially as it is far from infrequent, intruding several times into almost all the chapters (eighty) of the book.

There are few parts of the work in which one may not discover uncouth and outlandish terms and expressions—to wit, "specificity," "vultuous," "there is a species of chicken pox, which has a *huge* resemblance to variola," "paridisialcal," "remediless," and the like.

The employment, however, of awkward words and phrases, and the confusion of many tongues, are not such serious blemishes as obscurity and vagueness of style,—faults of frequent occurrence in the work of Dr. M'Cormac, and sometimes dependent upon an ungrammatical construction of his sentence. We shall add one example (at page 140):—"The tongue, moist and clean though red, for the most part, is occasionally hard and dry."

Treating of diabetes, Dr. M'Cormac falls into a most serious error, asserting that "Uric acid, if not urea, is deficient in diabetic urine," although a few lines further on he records the discovery by M'Gregor that different patients were passing from 500 to 1000 grains of urea in the twenty-four hours; it would seem that the author was ignorant or forgetful of the fact that 500 grains much exceed the greatest amount of secretion from a healthy person during twenty-four hours.

In the chapter on asphyxia (which, by the bye, with several others, is very meagre), Dr. M'Cormac says, "the stoves made use of on the continent and recently in this country, particularly when the tops, if any, are left off, sometimes entail the same result, as I once had nearly occasion to experience. The numbers annually cut off in Britain alone, by burning coals or other fuel in close apartments, is incredible." Surely Dr. M'Cormac must have been dreaming when he wrote the preceding sentences; his assertion is directly contrary to the fact; every medical man knows that asphyxia "from the fumes of burning fuel in close rooms" is as rare in England as it is frequent in France. Let Dr. M'Cormac refer to the Coroners' Report ordered by Parliament on the motion of Sir R. Inglis, and he will see that during the two years included in the report there was not a single instance in England of that species of poisoning which he says is of incredible frequency!

We might point out similar errors in the chapters on laryngitis, laryngismus stridulus, and elsewhere; but we have said enough to show that this book has many faults peculiarly unfortunate in a work written for the instruction of the young and inexperienced; we have only to add that the mistakes evidently arising from a careless correction of the proof sheets are not remedied by a table of errata.

It is true that in many chapters (notwithstanding the faults we have enumerated) the author has collected much useful matter, and proved that his reading has been extensive; but seeing that the student, in arriving at the excellent portion, must be puzzled and perhaps misled by the numerous obscurities or errors, we have no hesitation in saying that Dr. M'Cormac's treatise is one which we cannot recommend.

Persoz distilled gluten with sulphuric acid and chromate of potassa, and obtained as products, first, carbonic acid, and afterwards prussic acid. The residue contained chromate, alum, and sulphate of ammonia; it seems, therefore, that gluten yields, by oxidation, nothing but carbonic and cyanic acids and ammonia.—*Comptes Rend.*

ACADEMY OF SCIENCES, PARIS.

January 9, 1843.

POISONING.

M. Ducros forwarded an account of various experiments which showed that the symptoms of poisoning with strychnine and brucine were completely arrested by means of a machine affording negative electricity. On the other hand, the poisoning was rapidly hastened by positive electricity. The movements of extension and flexion of the limbs also hasten the period of death, even more so than positive electricity. Lastly, both kinds of electricity hasten poisoning with arsenious acid. The animals submitted to experiment were rabbits, dogs, and guinea-pigs.

CIRCULATION THROUGH THE CAPILLARIES.

M. Arago read an analysis of a memoir, by M. Poiseuille on this subject. The author first proves, by direct experiments, that in passing through tubes, of small diameter, the fluid moves in a canal, the walls of which are themselves formed by the moving fluid, so that the various phenomena are independent of the nature of the walls of the tube, and connected with the reciprocal action of the fluid molecules in movement. This fact being admitted, the author thought that the flow should present the same phenomena in living and inert tubes.

In the first place, the author mixed acetate of ammonia, nitrate of potass, and alcohol, with the serum of the blood, and found that the two first-mentioned substances accelerated the flow from the living capillaries, while the alcohol retarded it. In the second section of his memoir, the author describes the effects of experiments on the capillaries of a part deprived of life. Here, also, the flow of blood was accelerated by the ammonia and potass, but retarded by the alcohol.

The author next shows, from experiments on large animals (the horse, &c.), the time required for the passage of the blood from one jugular to the other, in its transit through the right side of the heart, the pulmonary artery, pulmonary veins, left side of heart, ascending aorta and capillaries, which give origin to the jugular vein; he finds that eighteen to twenty-four seconds are required for this trajectory under the influence of acetate of ammonia or nitrate of potass, while forty to forty-five seconds are required under the influence of alcohol. Thus the phenomena of the flow of blood, according to the doses employed, are the same in living and inert tubes; but this similarity by no means excludes the vital and special action of certain substances on living tissues. Thus coffee, introduced into the veins, doubles the intensity of the contractions of the heart, while opium reduces their intensity by one-half. The object of M. Poiseuille's researches is to discover the physical properties which are common to living and inert bodies.

ASSURANCE OFFICE FEES.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I have much pleasure in informing you that *eighty-two* county practitioners have given their assent and expressed themselves strongly in favor of the resolution adopted by the medical prac-

tioners of this town on the 25th October—viz., “In union with the British Medical Association, we pledge ourselves not to answer the inquiries of insurance offices, unless accompanied by a fee of one guinea.” The British Medical Association say, “they think that this fee should be paid by the assurance companies; but it must be a matter of arrangement between themselves and the proposer whether it or any part should be paid by the latter, it should at all events accompany the letter which is sent by the company.” It is therefore evident that the medical attendant for answering such inquiries is pledged not to receive the fee direct from his own patient, but it must be either paid or forwarded to him by the office. The profession then merely ask the offices to perform an act of courtesy; and I am happy to say that the directors of the Salop and North Wales Life Assurance Office, on the subject being explained to them last month, readily consented that the fee should be forwarded with the certificate by the office to the medical attendant, as it was evident that no class of men enter into similar combinations unless laboring under some practical grievance. The members of the Shropshire Medical Association are urged by principle, feeling, and interest, to adopt the present line of proceeding, and it is their determination systematically to discuss the subject with their patients and acquaintances, to point out the unjustifiable advantages taken by the modestly self-styled “oldest and best offices,” and to draw attention to the more equitable and more moderate terms of the new offices, particularly to the invaluable clause of the London, Edinburgh, and Dublin office, making the policies indefeasible and indisputable.

There are about 115, I believe not 120, medical practitioners resident in Shropshire, of whom 102 are now members of this association, and eight more have expressed their approval of the resolution, but decline pledging themselves to act up to it in every case. A similar resolution is now nearly signed by every practitioner in Montgomeryshire; and if the other counties take the subject up with similar spirit and zeal, the assurance companies will, in a very short time, be compelled to accede to our terms, and no longer treat our wishes and remonstrances with contempt.

I am, Gentlemen,

Your obedient servant,

ROBERT CARTWRIGHT,

Hon. Sec. to the Shropshire Medical Association.

Shrewsbury, Jan. 16, 1843.

P.S.—If not taking up too much space in your columns, I shall feel particularly obliged by your publishing the subjoined list of names for the information of members in different parts of the county:—

Bishop's Castle—H. Brook, Medlicott, A. Butler.
Bridgnorth—J. M. Coley, J. H. Martin, J. E. Newall, J. Phillips, W. Thursfield.
Broseley—R. Thursfield, R. Wyke.
Cleobury Mortimer—W. W. Jones, T. Pope.
Church Stretton—C. Mott, R. Wilding, W. Wilding.
Drayton—J. N. Haslam, W. W. Saxton, S. Swinerton.

Ellesmere—G. Birch, G. Gwynn, S. Legh, T. Mousley, J. E. Watson.

Hales Owen—J. M. Bloxham, G. D. Haslewood, E. Moore, E. B. Phillips, J. Luscomb Tud.

Ludlow—J. Baines, E. Baines, G. Hooper, F. A. Stocker, M.D., R. Valentine, Wakefield, H. Walker, M.D.

Madeley—S. Good, D. D. Gourley, H. J. Owen.

Newport—T. B. Baddeley, W. E. Baddeley, J. Burgis, G. H. Duncalfe, R. Higgins, R. G. Higgins, W. Lindop, W. Wood, M.D.

Shrewsbury—J. Y. Arrowsmith, J. Bratton, R. Cartwright, C. T. H. Clarke, W. Clement, W. J. Clement, D. Crawford, J. Dickinson, T. J. Drury, M.D., E. Foulkes, G. P. Gill, W. Griffiths, J. N. Heathcote, H. Johnson, M.D., H. Keate, W. Onions, T. Pidduck, J. Stevens, S. Wood, Rice Wynne.

Wellington—J. Beeston, H. Bidwell, C. H. Greene, C. Seager, M. Webb, J. F. Webb, M. Webb, jun., R. P. Weston.

Wem—C. A. Beetenson, E. Gwynn, T. Walmsley, J. G. Wilson.

Wenlock—A. Bowyer, W. P. Brookes, A. G. Brookes.

Whitchurch—A. Beacall, P. Brown, G. Gretton, T. Groom, S. Welch.

Atchan—W. M. Needham.

Brockton—J. Hickman.

Ditton Priors—E. Davis.

Hodnet—J. A. Walmsley, B. Lees.

Ironbridge—R. F. Procter.

Longden—J. H. Sutton.

Munslow—C. Potheary.

Oswestry—J. Large.

Pitchford—J. Durnell.

Pontesbury—W. Eddowes, W. Roderick.

Prescott—A. M. Needham.

Ruyton—R. Broughton.

Shiffhall—S. Bennett.

Strefford—R. Jones.

TWELFTH-NIGHT IN A LUNATIC-ASYLUM.

[The subjoined account of the working of the humane system of managing the insane at Hanwell, which we have extracted from the "Morning Chronicle," is, we have good reason to suppose, from the pen of Dr. Forbes.—EDS.]

Since the introduction of the humane and rational, or, as it is commonly called, *non-restraint system* of treating the insane, into Hanwell Asylum, it has been customary, on two or three occasions during the year, to give a holiday, merry-making, or festival to such of the inmates as are well enough and quiet enough to partake of it. These *fêtes*, or "parties," as the patients call them, have not been got up from any motives of display, but constitute part of the system of management adopted by Dr. Conolly, one essential principle of which is—to endeavour to operate on the intellect through the affections. The constant practice, in accordance with this principle, is to make the poor creatures as comfortable and happy in all things as their unfortunate mental condition will permit; and, as it has been found that the meetings in question have given great satisfaction to the inmates, the magistrates governing the asylum have most liberally and humanely co-operated with Dr. Conolly and the matron, in giving to them as many attractions as are compatible with their responsibilities as trustees of

the public money. On New Year's Eve a merry-making of the kind referred to was held, under the superintendence of the matron, Mrs. Bowden, in the apartments of the female patients, and was productive of much pleasure and profit to the unfortunate individuals for whom it was got up.

An entertainment of a like kind was prepared on Friday evening last, Twelfth-night, for the male patients; and as we were fortunate enough to witness this very singular and most interesting reunion, we will here give an account of some of the circumstances which dwell most prominently in our memory.

The scene of the *fête* was one of the long galleries on the male side of the house which open into the great central tower, and the circular gallery on the same floor within this tower. These galleries were richly and very tastefully decorated with festoons of evergreens, interspersed with drawings and numerous mottos in ornamental borderings. The greater part of these decorations was the work of patients; the paintings and the mottos (some of which were in Latin) we believe were exclusively so. On our entrance we saw ranged along both sides of the galleries long seats, flanked by narrow boards for tables, all neatly covered with clean table-cloths, and already laid out with plates and knives and forks. Behind the tables a great many of the patients were seated, quietly looking on at the proceedings of their more active companions, or busy talking with their neighbours, or with some of the strangers; some also were sitting apparently regardless of all around, absorbed in their own fancies, gloomy or cheerful, with their thoughts, probably, far away from the scene before them. These, however, formed but a small minority, as most of those present were at least sedately cheerful, while many were most vivaciously gay. Most of this class were on their legs, some dancing to the band, some in earnest conversation with the gentlemen or lady visitors, or with the officers of the house; some singing, some reciting poetry, many imparting in most confidential whispers to the strangers their alleged wrongs from bad relatives, from wicked overseers, from corrupt magistrates, and from yet higher and more dignified functionaries. Many pleaded earnestly for the listeners' interference to obtain their discharge from the asylum, as they said they were now quite well, although often admitting previous insanity. The band, which was formed partly of patients and partly of servants of the house, frequently perambulated the long galleries between the rows of patients, many of whom showed their interest in the proceedings by beating time with their hands, or with their knives or forks on the table, and some by aiding the music with their own vocal strains. Occasionally the musicians became stationary, and playing a lively air, a ring was formed, and a dance was forthwith instituted and kept up for some time with great spirit. On such occasions some of the keepers invariably joined the party, and contributed greatly, by precept and example, at once to the merriment and to keeping it within decorous bounds, which, however, to say the truth, was scarcely ever necessary.

After the dance there was music, and plenty of it, both vocal and instrumental. At one time one of the ladies, the wife of one of the officers, would sit down to the piano, which was placed in the centre of the

gallery, and sing charmingly a cheerful or pathetic ballad, closely surrounded by a most attentive, decorous, and evidently delighted auditory of patients; at another time, the celebrated Mr. Mainzer (who was one of the visitors) would preside, and lead, in one of his own beautiful choruses, having previously collected from the bystanders a numerous band of vocalists to join him. Then we had *God save the Queen* sung in grand style, the whole gallery nearly joining in the chorus, with as much loyal zeal as her Majesty's subjects beyond the walls could testify. Then supper was announced, and every one took his seat, while a capital supply of meat and beer was laid on the tables—to all of which viands full justice was done. After supper, pipes and tobacco were supplied to all claimants; and that these were not few or far between was soon evident to more senses than one, from one end of the gallery to another, and from floor to roof. On the exhaustion of the pipes and the dispersion of the smoke, the music, and singing, and dancing were renewed, sometimes at intervals, and sometimes simultaneously, until the hour of nine, when *the retreat* was sounded on the drum, and the party at once broke up, the patients immediately retiring to their respective wards, not without many good nights given, and much shaking of hands with the officers and visitors who had most engaged the attention of the patients during the evening.

Many things were done and much was said during this remarkable evening, which strikingly illustrated the beneficial influence on the minds of the patients of such entertainments, and as strikingly demonstrated the incalculable superiority of the general plan of treating the insane now in use at Hanwell and other asylums, over the savage and cruel system which formerly prevailed, but which, thanks mainly to the genius and labors of Dr. Conolly and the humane and liberal views of the magistrates of Middlesex, is now gradually vanishing from sight in every corner of this kingdom. It was surely a scene calculated to excite other emotions besides mere surprise, when out of the whole number of 407 insane male patients now in the asylum, 230 were found voluntarily to join in, and most of them able to enjoy, the simple festivities described, for a period of full three hours, without the occurrence of a single accident or disturbance, of even the slightest kind, and without its being necessary to remove a single patient from the apartment! It is hardly necessary to say that not one of these men was placed under any other restraint than that supplied by the presence of their officers and their own sense of propriety; that they were all allowed to use their knives and forks, and had the free enjoyment of all their limbs and the power of locomotion at will, just as if they had been perfectly sane; and such was the obvious rationality of the treatment of these unhappy persons, such its natural and evident results in their whole expression and conduct, that the idea of fear or apprehension of danger in mingling with them could not possibly arise in the mind of any beholder. On the contrary, the natural impression seemed to be, that we were in the midst of a school of great children, or in a hospital of men suffering from bodily ailments, while Dr. Conolly and his able coadjutors were the kind masters imparting instruction with the considerate cordiality of parents, or humane and tender-

hearted surgeons relieving or removing all the pains that were amenable to art, and soothing and cheering the minds of the incurable by the most affectionate assiduity. What a contrast this formed with the ancient system—with the chains, and the locks, and the stripes, on the one hand, and with the fury, and squalor, and horror, and despair, on the other—need hardly be mentioned!

Nothing was more gratifying in the whole scene than the unaffected interest evidently taken in it by the keepers, and their marked kindness to their respective patients; and it was delightful to witness the general good feeling exhibited by the patients to their attendants. This is fully as extraordinary a change from ancient usages as is the plan of treatment we have noticed. In all the dances and all the other amusements these men (all respectably dressed) joined with a heartiness which could not be assumed and which showed that they were imbued with the spirit of their masters. Indeed, the same spirit seemed to animate all the other officers and ladies of the establishment, and to be shared even by the children. It was an affecting sight to see the children of some of the officers mingling, not only without any fear, but with evident joy in the gaieties; and nothing could afford a more striking illustration of the prevalent conviction of the perfect success and *safety* of the system than this very fact of the fathers and mothers permitting such an intercourse between the patients and their children. Among the children present was a beautiful little girl, not more than four years old, the daughter of one of the assistant physicians; and we were struck more than once with the effect produced on some of the patients by the "unconscious fascination undesignated" of this sweet child. She reminded us of the "son of light—the lovely form" that came "to make glad" the wrecked heart and bewildered brain of *O'Connor's child*, in Campbell's exquisite poem of that name. An old man, one of the most turbulent in the house, went smiling up to her and begged to be allowed to kiss her hand; and when she timidly and bashfully refused, he very gravely took a packet from his pocket, and carefully unrolling its many folds, presented her, as if something most precious, with a piece of painted card, which was all it contained. Another man, a German, with calm but cheerful eye, and fine dark locks hanging over his shoulders, took her up in his arms and held her high to see some sport that was going on.

Our space will not permit us to detail half the striking incidents of this evening that would interest the humane reader; but we cannot conclude without recording our opinion, founded on the experience of this and other recent visits to Hanwell, and on visits to other asylums in former years, that it is only since the veil had been removed from it by Dr. Conolly that the *real character of madness* has been understood. Under the former system of cruel restraint and severity of every form, physical and moral, the natural expression of the emotions and feelings, *artificially produced by the treatment*, was confounded with the true phenomena of insanity. The anger, rage, fury—the impulse of revenge for insults—the despair, the horror—the utter regardlessness of personal comfort and cleanliness—the abhorrence of life and the desire for death—emotions, feelings, and sentiments that would

be, to a certain extent, natural to a *sane* man, under the circumstances referred to, might be expected to be manifested with tenfold energy in men deprived of their reason; but this never seemed to be considered—everything was set down to the score of insanity; and the poor victims were doomed to additional sufferings for exhibiting, in their words and actions, their sense—in this case, their *just* sense—of the cruelties to which they were subjected! In making this statement, we wish to be understood as implying that the cruel treatment referred to was sanctioned by the directors of asylums only from a mistaken conviction of its *necessity*, as we believe the physicians and surgeons who recommended and witnessed these doings were really as benevolent as those who now abjure it as utterly unjustifiable. It is only very recently that the truth has dawned upon us, and it would be most unjust to chastise our predecessors for going astray in the darkness.

In proof of the truth of the statement just made, we need merely refer to the state of the inmates of Hanwell, not merely as exhibited during the “party” above described, but habitually during every day of the week. Out of nearly one thousand patients, constantly under treatment, the uninstructed visitor, in making the circuit of the whole house, will not meet with one individual who will answer to his preconceived idea of “a furious madman,” and will rarely see so many as three or four who are in any way troublesome or difficult to manage. Sometimes—and only sometimes—one or two out of the thousand may be found locked into their bed-rooms on account of being temporarily excited, so as to be troublesome to their neighbours; but this seclusion is invariably of short duration, and the subject of it returns speedily to his ward, to his amusements, or to his *work*. It is generally known that a large proportion of the inmates of this and all other well-regulated asylums are now constantly occupied in the exercise of their various trades, or in gardening and agricultural pursuits. In such occupations they are, of course, entrusted with the free use of *tools* of all descriptions, with which they have unlimited facilities, if so minded, to wound or destroy themselves, their keepers, or their fellow patients. *Such an event, however, has never occurred under the humane system;* the utmost extent of injury that has been done being merely an occasional black eye from a blow with the hand; or, among the ladies, a little tearing of caps or scratchings of the face, when the organ of combativeness is more than usually active. In like manner, and for the same reasons, *suicide* has become vastly less frequent under the new system. We think we are correct in stating that not more than *one* instance of self-destruction has occurred in Hanwell during the three years’ superintendence of Dr. Conolly, and none during the last two years, among an average number of 900 patients constantly in the house. We had a long conversation with *a patient*, on Friday evening, on this very subject. He himself had formerly been disposed to commit suicide; and he assured us that the system of non-restraint was the most effective cure for this propensity, not merely in his own case, but generally. Among insane persons there will always be a certain proportion disposed to suicide, and no plan will always be able to prevent its occurrence; but both reason and experience show that

the surest means of counteracting the propensity is to *render life as little burdensome as it can be made under the circumstances of each individual case*. Our informant, on this occasion, very pertinently asked, “What, sir, could prevent me strangling myself with my own hands, if so inclined? or what vigilance, or bolts, or chains, could shut up the thousand avenues to death, which are always open to a determined will?”

It is a remarkable feature in the conversation of the inmates of Hanwell, that many of them express themselves as most sensible of the kindness with which they are treated, and are loud in the praises of the “new system,” as they term it. One person, now quite convalescent, and who evinced, in his conversation with us, much cleverness, good sense, and a cultivated intellect, had been in other asylums, in various countries, both as a patient and as a visitor, and he declared that none could bear comparison with Hanwell. He stated his opinion most positively to be, that had he *formerly* been sent to this asylum, instead of another, he would have been cured *immediately*, in place of being long retained as a *furious and dangerous maniac*. This man said his fury arose from his indignation at the barbarous treatment he received; and he admitted that he *was dangerous*—but why?—because his whole blood was boiling with the desire of vengeance for the cruel wrongs and indignities he suffered.

But we must stop, although much of interest remains to be communicated; we cannot, however, close these hasty observations without formally expressing our sense of the high obligation the world is under to the magistrates of Middlesex for the noble support they have given to Dr. Conolly, in working out to such full perfection, his good and glorious system. The complete demonstration of the practicability of this system, and, indeed, its establishment on a basis that can never be shaken—the basis of ample experience—must not merely ensure to him, while he lives, the respect and veneration of all good men, but must carry his name down to the latest posterity as that of a man worthy to be ranked among the great benefactors of the human race. In him are combined the finest genius with the warmest benevolence and the most exalted philanthropy; and it has been his good fortune, and the good fortune of the age in which we live, that it has pleased Providence to place him in a position where he has had ample opportunities of carrying into effect his high designs.

It would be injustice in the writer of this communication to lay down the pen without expressing his sense of the admirable manner in which Dr. Conolly is supported in the government of his poor friends in Hanwell, by the assistant physicians, Drs. Begley and Davy; by Mrs. Bowden, the matron; Mr. Wheeland, the steward; and by the excellent chaplain, Mr. Burt. This latter gentleman has lately undertaken to instruct the more ignorant patients in such religious and general knowledge as is suitable to their condition, and, we understand, with the happiest effects. In him the medical officers have a most valuable coadjutor.

RETROSPECT OF THE MEDICAL SCIENCES.

VARICOCELE.

M. Vidal de Cassis has published in the "Annales de Chirurgie Française," a communication on the radical cure of varicocele by a modified application of the ligature, and on its applicability to the treatment of tumors of the testicle. Although in general opposed to operations for the cure of varicose veins, on account of the great risk of the occurrence of fatal phlebitis, the uncertainty of the results, and the frequency of relapse, M. Vidal did not feel the same repugnance to operations for the cure of varicocele, which he regards as a purely local affection. His opinion on the propriety of operating for the removal of the last-named infirmity has been considerably strengthened of late, and he has, himself, already operated thirty times.

When varicocele occurs in the persons of old men, who have been long afflicted therewith, the operation should not be performed; as the inconveniences to which the patient is subjected are not sufficient to warrant the proceeding, more especially as at an advanced age it could scarcely be undertaken without involving some risk of a fatal termination. M. Vidal, however, has seen it occur before the fifteenth year, and says that he has very rarely met with a case where it commenced after the thirtieth. Among the reasons alleged by him for operating on this variety of varix, when it occurs in young persons, are—the inconvenience and pain which it causes, the impediments it offers to exercise or moderate exertion, the sterility it induces, and the absence of the varicose diathesis. Patients affected with varicocele, as might be anticipated from their age, are rarely subject to a varicose condition of the veins of the legs, to hæmorrhoids, or any other disease connected with varix. He considers varicocele, as has been already remarked, to be essentially a local affection, arising from excessive exercise of the genital organs, either with women, or by onanism, or by other excitement of the testicles. He narrates a case of varicocele following orchitis in the person of a young man much addicted to women, in illustration of his position:—The epididymis of the left side was enlarged and indurated, consequent on a gonorrhœa and orchitis, and the veins of that side were varicose. The diseased state of the veins followed so rapidly the supervention of inflammation of the testicle, that M. Vidal considers himself entitled to call it an acute affection, in opposition to the same disease occurring in old men, which he terms chronic. Varicocele dependent on the causes above mentioned, being essentially local, is not connected with the varicose diathesis to which varix, occurring in another part of the body may be referred—that is to say, the latter variety is dependent on several causes, seated sometimes at a distance from the part affected.

M. Reynaud, of Toulon, whose mode of operating, somewhat modified, has been adopted by M. Vidal de Cassis, proceeded as follows:—He seized the spermatic cord of the diseased side with both hands; he sought for, recognised, separated, and pushed inwards the vas deferens towards the root of the penis; he distinguished it from the vessels and nerves of the testicle by its hardness; then pinching up the scrotum

between the thumb and forefinger of the left hand, so as to embrace the spermatic vessels and nerves, he traverses the base of it with a curved needle, armed with a waxed thread. He then releases his hold of the scrotum, brings the two ends of the thread together, and ties them over a thick but short cylinder of linen, previously placed between the thread and the skin. The ligature must be so tied that it may be loosed or unfastened, in case it should become necessary to diminish the compression exerted on the parts. The only dressing required is the application of lint spread with simple cerate, and a compress. No bandage is necessary. A slight degree of inflammation generally arises, but it lasts but a short time, and two or three days after the operation the ligature may be tightened over a fresh cylinder. If, however, the inflammation be sufficiently extensive and the pain severe, when the ligature is untied, it must not be re-secured until the inflammation has been removed by emollient applications.

The tightening of the ligature from time to time causes the gradual division of the soft parts, which cicatrise gradually from the part where the needle entered; by the fifteenth or eighteenth day the spermatic nerves and vessels are cut through, and there remains only the skin undivided; M. Reynaud then, not to leave a doubt as to the perfect section and obliteration of the vessels of the cord, passes a grooved director, and divides the remaining integument with the bistoury. The wound which results from this is soon healed, and the patients are generally discharged cured in twenty-five days after the operation.

The modifications introduced by M. Vidal, consist in the substitution of a piece of silver wire for the ligature instead of the waxed thread, by which he is enabled to tighten or relax the constriction without undoing the knot, by merely passing the end of a director between the wire and the linen cylinder, and twisting or untwisting it as occasion may require, and the use of a straight instead of a curved needle for the application of the ligature. He also converts the operation into a subcutaneous one by not dividing the integument, when by drawing a little on the ends of the wire, he finds the vessels are divided. If he believes that there is danger of a relapse, he passes two ligatures, about an inch distant from each other, the first of which only is knotted and tightened, the other, placed nearer the testicle, serves as a *ligature d'attente*. If the first ligature produce sufficient inflammation and swelling of the varicose mass below, the other ligature is not tightened, and if the inflammation run very high, it may be removed and the first one relaxed, but it is as well to retain the *fil d'attente* as long as possible; for if, after the veins have been cut through, and the induration has disappeared, a varicose condition of the cord still continues, or there should be a tendency to relapse, the second ligature may be tightened, and a radical cure be effected.

The same operation has been applied by M. Vidal de Cassis in two cases, to the treatment of varicocele, attended with enlargement of the testicle, and in both instances with complete success. He proposes further to extend its application to the treatment of incurable

tumors of the testicle and of other parts, which may be in an analogous condition. In fact, he says, if the ligature does not effect a definitive cure, it may arrest the disease, prevent its ulterior development, and if it be malignant, put an obstacle to its propagation at a distance. At all events it may be preparatory to extirpation, and afford a better chance of success for the latter operation. In the latter case, the spermatic veins alone are not to be tied, but the entire cord must be ligatured—an operation, however, only to be performed in cases where the testicle is much diseased, as in true scirrhous and tubercular degeneration.

CRICOID ANEURISM.

An example of this confessedly rare disease has been recorded in the "London Medical Gazette," by Dr. Laurie, the professor of surgery in Anderson's University, Glasgow. It occurred in the person of a young man, twenty-one years of age, a bleacher by trade. All the arteries of the right upper extremity, especially the larger arterial trunks, were enlarged, and of a more powerful beat than natural. The brachial artery was apparently equal in size to the common iliacs. The pulsation was peculiarly vibratory. The radial artery was greatly increased in size, and tortuous throughout its course; about the middle of the forearm there was a swelling about the size of the end of the thumb, which pulsated more strongly than any other part of the vessel, with a strong whirring vibratory feel, and a loud rasping souffle. There was another swelling, about half an inch from the wrist, as large as a pullet's egg, of an ovoid form, with a somewhat prominent apex. The ulnar artery, in like manner, was traced in the lower half of the forearm, presenting pathological appearances precisely similar, until it arrived opposite the larger tumor on the radial, where it became more dilated and tortuous, extending across the wrist, forming a flattened swelling as thick as the finger, and as large as a half-crown piece, pulsating very violently, and communicating to the ear a loud rasping souffle. The same swelling, more flattened, and pulsating with less violence, extends along the ulnar half of the palm, and terminates in a sloughing sore, occupying part of the hand and the fingers. The radial half of the palm and the backs of the fingers have the same appearance to the eye as the ulnar, but to the touch are devoid of pulsation, with a peculiarly soft semi-fluctuating feel, as if occupied by a congeries of tortuous dilated veins. The integuments have a slight blue tinge, and there are three superficial nævi, one on the palmar wrist, one on the palm, and one on the second finger. The veins of the arm were enlarged, and on admission were reported to pulsate feebly. Pressure on the arteries caused acute pain in the fingers and palm. The limb was smaller than its fellow. The disease was congenital. He was admitted into the hospital on account of hæmorrhage to an alarming extent from the hand. Five days before he was received he lost two pounds of blood, and within eight hours of his admission the bleeding recurred to nearly an equal amount.

The brachial artery was tied, after a consultation, in the lower third of the arm; it was as large as the little finger, and its coats were very thin. Pulsation in all the parts distal to the ligature immediately ceased. The patient bore the operation well, and

recovered from its immediate effects, but the hæmorrhage recurred profusely on the eighth day from the same situation as before, and was commanded only by pressure on the spot. Pulsation having returned in the ulnar artery, a ligature was placed on it two days after; the vessel was found to be large and very tortuous. The ligatures came away in due time, and he had no further bleeding. The first and second fingers mortified, and were removed, and one or two of the articulations of the little and ring fingers were opened by the separation of the sloughs. The patient was ultimately dismissed cured.

The young man showed himself to Dr. Laurie a few months afterwards, when his hand and arm were examined. The palm of the hand was more soft and flaccid than when he left the hospital, and pulsating obscurely. No pulsation could be felt in any part of the ulna; the radial artery pulsated feebly throughout; the anterior interosseous was felt very obscurely, if at all. The brachial at the bend of the arm was enlarged, but did not beat strongly; it was obliterated for an inch at the point where it was tied, and a branch was found beating in its immediate neighbourhood. The subclavian had an approach to a double sound, heard most distinctly when the patient was in the erect posture; when sitting, the second sound had more of the bellows' murmur. The heart was carefully examined, and found to be healthy.

Dr. Laurie considers that this case goes to prove that this curious arterial disease belongs to the same class as nævus and aneurism by anastomosis. In this instance, examples of all the forms were presented on one limb: the simple nævus on the integuments of the wrist, palm, and fingers, the erectile tissue bleeding profusely at the roots of the fingers, on the ulnar side of the palm tortuous enlargement the vessel pulsating violently, on the radial side, the same state without pulsation; on the vessels of the forearm there was cricoid aneurism, with thinning of the coats, tortuosity, and small aneurismal tumors of the mixed kind, and in the brachial, axillary, and subclavian, enlargement of the calibre of the arteries, with thinning of their coats, but without tortuosity or aneurismal tumors.

MICROSCOPIC GLOBULES FOUND IN URINE.

Dr. Golding Bird has published a note in "Guy's Hospital Reports" for October on the microscopic globules found in the urine, sufficiently constant in their character to admit of their being readily identified. 1. The true pus particle is roughly granular on its surface, and evidently compound in its structure, becoming reduced, on the addition of ammonia, to a mucous mass, readily miscible with water, in which, however, the particles may be discovered, apparently shrivelled. If a drop of acetic acid be added to one of purulent urine, and the mixture placed under the microscope, the particles will be found to be disintegrated and partially dissolved, leaving numerous minute transparent circular bodies, which have been regarded as the nuclei of the original particles; these are free from granulations on their surface, and about one-fourth the size of a blood-disc, or 1-8000th of an inch in diameter: the urine containing any appreciable quantity of pus being albuminous, and becoming opaque on the application of heat.

2. The true mucous globule is generally smaller

than the pus particle, being about 1-2000th of an inch in diameter, and so closely resembles it that it is scarcely possible to distinguish them, except from the fact that the granulations on its surface are fewer and less distinct; it is not readily miscible with water, and it presents merely a less shrivelled appearance on the addition of ammonia. They are often found cohering together, forming a kind of imperfect structure. Under a low magnifying power they appear circular, with a smooth, well-defined edge, the granular condition of the surface showing itself under a power of 250 diameters.

3. The large organic globule is of frequent occurrence in the urine, where it is found free and floating, scattered here and there, there being seldom more than a dozen in the field of the microscope at a time. It varies in size from 1-1000th to 3-1000th of an inch in diameter. On the addition of acetic acid, these globules are broken up, and leave minute transparent single bodies, like those left by pus when similarly treated.

4. The small organic globule is but rarely met with. It is apparently simple in its structure, and perfectly spherical in shape; it is free from granulations on its surface, and seldom so large as a blood-disc, being generally about 1-3000th of an inch in diameter. It mixes readily with water. These globules often form a glistening white deposit at the bottom of the capsule, in which the urine has been allowed to cool, after having been gently heated, and in this state they closely resemble, to the naked eye, the oxalate of lime deposit.

Of these globular productions, the pus particle is essentially connected with an albuminous state of the urine; as in all cases hitherto examined, it has been always accompanied with a drop of serum, in which it floats, just as the blood-disc does in liquor sanguinis.

The true mucous globule is found in all urine which has been allowed to repose for a short time, so as to permit the cloud diffused through it to become deposited; if the urinary mucous membrane be in a state of irritation, the globules increase in quantity, but if diuresis exist at the same time, they are replaced by the third variety.

The large organic globule is found in abundance in the urine of pregnant women during the latter months, and when there is a frequent desire to empty the bladder. Dr. Bird says that it existed also in every case of ardor urinae that he had examined. They are almost invariably present in the urine in cases of granular degeneration of the kidney, and then, on account of the albuminous character of the secretion, are distinguished with difficulty from the pus particle. In several cases of malignant disease of the womb this globule has been found abundantly in the urine.

The small organic globule has been met with by Dr. Golding Bird but in two cases, in each of which its appearance was evanescent; both specimens of urine containing it were passed by women during menstruation. They much resemble in appearance the minute amylaceous particles met with in vegetable juices; they are about the size, and resemble in transparency and spherical figure the transparent nuclei obtained by treating the pus particle or large organic globule with acetic acid.

The milk and ferment globule are not noticed by Dr. Bird, as he has never seen the former unless when it had been added by the patient, and the latter is a secondary formation, occurring in diabetic urine when it has been kept some days, but not in a recent specimen.

TOXICOLOGICAL RESEARCHES ON THE VEGETABLE ALCALOIDS.

Caventou having some doubts as to the results published by Dr. Christison, relative to the possibility of proving the presence of opium in certain organic liquids, and especially in milk and beer, desired Messrs. Larocque and Thibierge, to repeat his experiments. The details and results of their inquiries are published in the "*Journal de Chimie Médicale*." Their object in the first place was to determine by actual experiment whether the reagents in ordinary use for discovering the presence of the vegetable alkaloids, more especially of morphia—to wit, the iodic acid, the perchloruret of iron, nitric acid, tannic acid, and ammonia were worthy of the confidence with which they are had recourse to. They have ascertained that crystallised iodic acid, or a concentrated solution of the acid is decomposed by neutral azotised matters; but a weak solution of the acid cannot be decomposed by these matters, unless either strong sulphuric acid, crystallisable acetic acid, or oxalic, citric, or tartaric acids be added. They conclude, therefore, that iodic acid ought to be used as a reagent for morphia with the greatest circumspection. The perchloruret of gold determines with the vegetable alkaloids, reactions which, for the present, may serve to distinguish between morphia, brucia, and strychnia. The reagents most deserving of confidence for the discovery of morphia, according to MM. Larocque and Thibierge, are nitric acid, the neutral perchloruret of iron, and the perchloruret of gold—with these the presence of morphia which had been mixed with beer, soup, or milk has been ascertained, and it is also easy to show by reagents the presence of meconic acid mixed with soup or milk, especially when the meconate of lead has been decomposed by weak sulphuric acid.

By means of reagents, the presence of morphia, strychnia, and brucia has been shown in matters which, after having been mixed with the salts of the alkaloids, have undergone the alcoholic, acetous, or putrefactive fermentation.

DISCOVERY OF SELENIUM.

In the first compartment of the lead chamber, in which is effected the preparation of sulphuric acid, from the sulphurous acid obtained during the process of roasting the ores of the Rammelsberg ochre works, a very delicate, reddish, slimy matter is found, consisting partly of the volatilised components of the ores mechanically carried over, and partly of products created by the action of the sulphuric acid thereon. Dr. Otto has analysed this matter, and found it to contain about four per cent. of selenium, of which rare element it may be considered a new and interesting source. Berzelius discovered it in like manner in the slimy products of a sulphuric acid factory at Gripshelm. This reddish slimy matter contains, besides selenium and sulphur, a somewhat considerable quantity of mercury and antimony, a little zinc, much copper and iron, and more lead, the latter chiefly existing as a sulphate. The sulphuric acid, with

which the slimy matter is mixed, contains arsenic.—*Liebig's Annalen*.

CYANATE OF AMMONIA (UREA).

Mix together twenty-eight parts of perfectly dry ferro-cyanate of potassa with fourteen of black oxide of manganese (pure) both in fine powder. Place the mixture on a smooth iron plate, and expose it to a dull red heat over a charcoal fire. After a short time it will begin to burn off itself, when it must be frequently stirred. After it cools, it is to be lixiviated with cold water. The solution is to be treated with twenty parts and a half of dry sulphate of ammonia, whereupon a copious deposit of sulphate of potassa will ensue. It has then to be allowed to stand in a warm place (under 212° Fah.) so as to concentrate the supernatant liquor, which is afterwards to be decanted off, and treated with alcohol of from eighty to ninety per cent. By this process, four ounces of perfectly colorless and beautifully crystallised cyanate of ammonia (urea) may be procured from one pound of ferro-cyanate of potassa.—*Ibid*.

SPIRITUS ETHERIS NITRICI.

Dr. Geiseler recommends the following process for the preparation of the spirit of nitric æther. Let twenty-four ounces of rectified spirits of wine, specific gravity 0.840, be mixed with four ounces of concentrated sulphuric acid, specific gravity 1.845; allow the mixture to stand for eight days, and then pour it on four ounces and a half of perfectly dry nitrate of potash, previously introduced into a distilling vessel; adapt the head and receiver thereto, and draw over, with a moderate fire, twenty ounces of the liquid, which may be rectified with magnesia. Prepared in this manner, a copper still, with a tin head and refrigerator, may be employed. Another advantage is, that the ethereal product thus obtained is not very subject to decomposition. A mixture of pure nitric æther and spirits of wine will not furnish an official spiritus ætheris nitrici, since this latter contains, in addition to the components of the former, aldehyd. It cannot be preserved over magnesia or bicarbonate of potassa, since these additions induce decomposition, and formation of nitrate of the alkali.—*Annals of Chemistry*, Nov., 1842.

PROTESTANT SISTERS OF CHARITY.

A society was founded about two years ago for the purpose of providing respectable nurses (for the sick of all classes), who will devote themselves to their duties from charity in the highest sense of the word, rather than from the hope of gain. The society is still in operation, and we trust will receive due support.

HYDROPATHY.

It is stated that an ex-M.P., and proprietor of a lunatic asylum, is about to open a hydropathic establishment in the neighbourhood of Harrow.

ACCIDENT TO BARON BERZELIUS.

By an account which we have received from Stockholm, we learn that the above very talented and eminent chemist has narrowly escaped with his life from an explosion which occurred to him during the pursuit of some investigation in which he has been engaged. The details are not given. We are happy to be enabled to state that the injuries sustained by the first chemist of the age have been but slight, although, from the mischief occasioned by the accident, it was a matter of surprise that he should have escaped with his life.—*Ann. of Chym.*, No. 17.

OBITUARY.

On Thursday, at his residence in John-street, Bishopwearmouth (Sunderland), Dr. Miller, in the sixty-fifth year of his age. The death of this respectable and much regretted practitioner is attributed to typhus fever, which he caught during a visit to a poor patient laboring under the disease.

PROMOTIONS AND APPOINTMENTS.

NAVAL.

Assistant-surgeons—Thomas Bell, to the *Perseus*; J. H. Hoare, to the *St. Vincent*; Dr. H. T. S. Beveridge, to the *Lightning*; Dr. Robert Hastings, to the *Thunderer*.

ROYAL COLLEGE OF SURGEONS IN LONDON.

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TO CORRESPONDENTS.

The letter from *Bath* on Medical Reform has been received.

A correspondent asks who *Dr. Fanchou* is. He had better inquire of the Coroner for Middlesex, who, since he has taken to science in his "leaders," makes the most incredible metamorphoses of names.

F.G.—The annual subscription commences in January. A post-office order may be sent to Dr. Hastings, of Worcester.

Medical Reform.—Nothing certain is known about the intentions of government. It may be that no bill will be introduced during the approaching session.

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ON THE PREPARATIONS

OF THE

INDIAN HEMP, OR GUNJAH,*

(*Cannabis Indica*)

Their Effects on the Animal System in Health, and their Utility in the Treatment of Tetanus and other Convulsive Diseases.

By W. B. O'SHAUGHNESSY, M.D., Bengal Army.

Late Professor of Chemistry and Materia Medica in the Medical College of Calcutta.

The narcotic effects of hemp are popularly known in the South of Africa, South America, Turkey, Egypt, Asia Minor, India, and the adjacent territories of the Malays, Burmese, and Siamese. In all these countries hemp is used in various forms, by the dissipated and depraved, as the ready agent of a pleasing intoxication. In the popular medicine of these nations, we find it extensively employed for a multitude of affections, especially those in which spasm or neuralgic pain are the prominent symptoms. But in Western Europe its use, either as a stimulant or as a remedy, is equally unknown. With the exception of the trial, as a frolic, of the Egyptian "hasheesh," by a few youths in Marseilles, and of the clinical use of the wine of hemp by Hahnemann, as shown in a subsequent extract, I have been unable to trace any notice of the employment of this drug in Europe.

Much difference of opinion exists on the question, whether the hemp so abundant in Europe, even in high northern latitudes, is identical in specific characters with the hemp of Asia Minor and India. The extraordinary symptoms produced by the latter depend on a resinous secretion with which it abounds, and which seems totally absent in the European kind. The closest physical resemblance or even identity exists between both plants; difference of climate seems to me more than sufficient to account for the absence of the resinous secretion, and consequent want of narcotic power in that indigenous in colder countries.

In the subsequent article I first endeavour to present an adequate view of what has been recorded of the early history, the popular uses, and employment in medicine of this powerful and valuable substance; I then proceed to notice several experiments which I have instituted on animals, with the view to ascertain its effects on the healthy system; and, lastly, I submit an abstract of the clinical details of the treatment of several patients afflicted with hydrophobia, tetanus, and other convulsive disorders, in which a preparation of hemp was employed with results, which

seem to me to warrant our anticipating from its more extensive and impartial use no inconsiderable addition to the resources of the physician.

In the historical and statistical department of the subject, I owe my cordial thanks for most valuable assistance to the distinguished traveller the Syed Keramut Ali, Mootawulee of the Hooghly Imambarah, and also to the Hakim Mirza Abdul Razes of Teheran, who have furnished me with interesting details regarding the consumption of hemp in Candahar, Cabul, and the countries between the Indus and Herat. The Pandit Moodoosudun Gooptu has favored me with notices of the statements regarding hemp in the early Sanscrit authors on materia medica; to the celebrated Kamalakantha Vidy-alanka, the Pandit of the Asiatic Society, I have also to record my acknowledgments; Mr. DaCosta has obligingly supplied me with copious notes from the "Mukzun-ul-Udwieh," and other Persian and Hindue systems of materia medica. For information relative to the varieties of the drug, and its consumption in Bengal, Mr. McCann, the deputy superintendent of police, deserves my thanks; and, lastly, to the medical gentlemen named in the sequel, I feel much indebted for the clinical details with which they have enriched the subject.

Botanical Characters—Chemical Properties— Production.

Botanical Description.—Assuming, with Lindley and other eminent writers, that the *Cannabis sativa* and *Indica* are identical, we find that the plant is dioecious, annual, about three feet high, covered over with a fine pubescence; the stem is erect, branched, bright green, angular; leaves, alternate or opposite, on long weak petioles; digitate, scabrous, with linear, lanceolate, sharply serrated leaflets, tapering into a long smooth entire point; stipules subulate; clusters of flowers axillary with subulate bractes; males lax and drooping, branched and leafless at base; females erect, simple and leafy at the base. Calyx downy, five parted, imbricated. Stamens five; anthers large and pendulous. Calyx covered with brown glands. Ovary roundish with pendulous ovule, and two long filiform glandular stigmas; achenium ovate, one seeded.—*Vide Lindley's Flora Medica*, p. 299.

The fibres of the stems are long and extremely tenacious, so as to afford the best tissue for cordage, thus constituting the material for one of the most important branches of European manufactures.

The seed is simply albuminous and oily, and is devoid of all narcotic properties.

Chemical Properties.—In certain seasons and in warm countries a resinous juice exudes and concretes on the leaves, slender stems, and flowers; the mode of removing this juice will be subsequently detailed.

* Published in the Transactions of the Medical Society of Calcutta for 1839, and now revised by the Author for the Provincial Medical Journal.

Separated and in masses it constitutes the *churrus** of Nipal and Hindostan, and to this, the type or basis of all the hemp preparations, are the powers of these drugs attributable.

The resin of the hemp is soluble in alcohol and æther; partially soluble in alkaline, insoluble in acid solutions; when pure, of a blackish grey color; hard at 90°; softens at higher temperatures, and fuses readily; soluble in the fixed and in several volatile oils. Its odor is fragrant and narcotic; taste slightly warm, bitterish, and acrid.

The dried hemp plant, which has flowered and from which the resin has not been removed, is called *GUNJAH*. It sells for 1s. 6d. to 2s. for 2 lbs. in the Calcutta bazaars, and yields to alcohol twenty per 100 of resinous extract, composed of the resin (*churrus*), and green coloring matter (*chlorophylle*). Distilled with a large quantity of water or spirit, traces of essential oil pass over, and the distilled liquor has the powerful narcotic odor of the plant. The *gunjah* is sold for smoking chiefly. The bundles of *gunjah* are about two feet long and four inches in diameter, and contain twenty-four plants. The color is dusky green; the odor agreeably narcotic; the whole plant resinous and adhesive to the touch.

The larger leaves and capsules, without the stalks, are called "*bang*, *subjee*, or *sidhee*." They are used for making an intoxicating drink, for smoking, and in the conserve or confection termed *majeon*. *Bang* is cheaper than *gunjah*, and, though less powerful, is sold at such a low price that for less than a halfpenny enough can be purchased to intoxicate an "experienced" person.

According to Mr. McCann's notes, the *gunjah* consumed in Bengal is chiefly brought from Mirzapur and Ghazepore, being extensively cultivated near Gwalior and in Tirhoot. The natives cut the plant when in flower, allow it to dry for three days, and then lay it in bundles averaging two pounds weight each, which are distributed to the licensed dealers. The best kinds are brought from Gwalior and Bhurtpore, and it is also cultivated, of good quality, in a few gardens round Calcutta. In Jessore, I am informed, the drug is produced of excellent quality and to a very considerable extent of cultivation. In Central India, and the Saugor territory, and in Nipal, *churrus* is collected during the hot season in the following singular manner:—Men clad in leathern dresses run through the hemp fields, brushing through the plant with all possible violence; the soft resin adheres to the leather, and is subsequently scraped off and kneaded into balls, which sell from 10s. to 12s. for 2 lbs. A still finer kind, the *momeea* or waxen *churrus*, is collected by the hand in Nipal and sells for nearly double the price of the ordinary kind. In Nipal, Dr. McKinnon informs me, the leathern attire is dispensed with, and the resin is gathered on the skins of naked coolies. In Persia, it is stated by Mirza Abdul Razes that the *churrus* is prepared by pressing the resinous plant on coarse cloths, and then scraping it from these and melting it in a pot with a little warm water. He considers the *churrus* of Herat as the best and most powerful of all the varieties of the drug.

* For very fine specimens of *churrus*, I have to express my thanks to Dr. Campbell, late political resident at Nipal.

Popular Uses.

The preparations of hemp are used for the purpose of intoxication as follows:—

Sidhee, *subjee*, and *bang* (synonymous) are used with water as a drink, which is thus prepared. About three tola weight, 540 troy grains, are well washed with cold water, then dried and rubbed to powder, mixed with black pepper, cucumber and melon seeds, sugar, half a pint of milk, and an equal quantity of water. This is considered sufficient to intoxicate an habituated person. Half the quantity is enough for a novice. This composition is chiefly used by the Mahomedans of the better class.

Another recipe is as follows:—

The same quantity of *sidhee* is washed, dried, and ground, mixed with black pepper, and a quart of cold water added. This is drank at one sitting. This is the favorite beverage of the Hindus who practice this vice, especially the Birjobassies and many of the Rajpootana soldiery.

From either of these beverages intoxication will ensue in half an hour. Almost invariably the inebriation is of the most cheerful kind, causing the person to sing and dance, to eat food with great relish, and to seek aphrodisiac enjoyments. In persons of a quarrelsome disposition it occasions, as might be expected, an exasperation of their natural tendency. The intoxication last about three hours, when sleep supervenes. No nausea or sickness of the stomach succeeds, nor are the bowels at all affected; next day there is slight giddiness and much vascularity of the eyes, but no other symptom worth recording.

Gunjah is used for smoking only; one rupee weight, 180 grains, and a little dried tobacco are rubbed together in the palm of the hand with a few drops of water. This suffices for three persons. A little tobacco is placed in the pipe first, then a layer of the prepared *gunjah*, then more tobacco, and the fire above all.

Four or five persons usually join in this debauch. The hookah is passed round, and each person takes a single draught. Intoxication ensues almost instantly; and from one draught to the unaccustomed, within half an hour; and after four or five inspirations to those more practised in the vice. The effects differ from those occasioned by the *sidhee*. Heaviness, laziness, and agreeable reveries ensue, but the person can be readily roused, and is able to discharge routine occupations, such as pulling the punkah, waiting at table, &c.

The *majeon*, or hemp confection, is a compound of sugar, butter, flour, milk, and *sidhee* or *bang*. The process has been repeatedly performed before me by Ameer, the proprietor of a celebrated place of resort for hemp devotees in Calcutta, and who is considered the best artist in his profession. Four ounces of *sidhee* and an equal quantity of *ghee* (clarified butter) are placed in an earthen or well-tinned vessel, a pint of water added, and the whole warmed over a charcoal fire. The mixture is constantly stirred until the water all boils away, which is known by the crackling noise of the melted butter on the sides of the vessel; the mixture is then removed from the fire, squeezed through cloth while hot—by which an oleaginous solution of the active principles and coloring matter

of the hemp is obtained—and the leaves, fibres, &c., remaining on the cloth are thrown away.

The green oily solution soon concretes into a buttery mass, and is then well washed by the hand with soft water so long as the water becomes colored. The coloring matter and an extractive substance are thus removed, and a very pale green mass, of the consistence of simple ointment, remains. The washings are thrown away; Ameer says that these are intoxicating, and produce constriction of the throat, great pain, and very disagreeable and dangerous symptoms.

The operator then takes two pounds of sugar, and, adding a little water, places it in a pipkin over the fire. When the sugar dissolves and froths, two ounces of milk are added; a thick scum rises and is removed; more milk and a little water are added from time to time, and the boiling continued about an hour, the solution being carefully stirred until it becomes an adhesive clear syrup, ready to solidify on a cold surface; four ounces of *tyre* (new milk dried before the sun) in fine powder are now stirred in, and, lastly, the prepared butter of hemp is introduced, brisk stirring being continued for a few minutes. A few drops of uttur of roses are then quickly sprinkled in, and the mixture poured from the pipkin on a flat cold dish or slab. The mass concretes immediately into a thin cake, which is divided into small lozenge-shaped pieces. Thus prepared it sells for 8s. the 2 lbs; one drachm, by weight, will intoxicate a beginner; three drachms one experienced in its use. The taste is sweet, and the odor very agreeable.

Ameer states that there are seven or eight *majoon* makers in Calcutta; that sometimes, by special order of customers, he introduces stramonium seeds, but never nux vomica; that all classes of persons, including the lower Portuguese or "Kala Peringhees," and especially their females, consume the drug; that it is most fascinating in its effects, producing extatic happiness, a persuasion of high rank, a sensation of flying, voracious appetite, and intense aphrodisiac desire. He denies that its continued use leads to madness, impotence, or to the numerous evil consequences described by the Arabic and Persian physicians. Although I disbelieve Ameer's statements on this point, his description of the immediate effects of *majoon* is strictly and accurately correct.

Most carnivorous animals eat it greedily, and very soon experience its narcotic effects, becoming ludicrously drunk, but seldom suffering any worse consequences.

Historical Details—Notices of Hemp and its Uses, by the Sanscrit, Arabic, and Persian Writers.

The preceding notice suffices to explain the subsequent historical and medicinal details. I premise the historical, in order to show the exact state of our knowledge of the subject, when I attempted its investigation.

Although the most eminent of the Arabic and Persian authors concur in referring the origin of the practice of hemp intoxication to the natives of Hindostan, it is remarkable that few traces can be detected of the prevalence of the vice at any early period in India.

The Pandit Moodoosudun Goopu finds that the "Rajniguntū," a standard treatise on materia medica, which he estimates vaguely at 600 years date, gives a

clear account of this agent. Its synonyms are "*bijoya*," "*ujoya*," and "*joya*," names which mean promoters of success; "*brijputia*," or the strengthener, or the strong-leaved; "*chapola*," the causer of a reeling gait; "*umunda*," or the laughter-moving; "*hursini*," the exciter of sexual desire. Its effects on man are described as excitant, heating, astringent. It is added that it "destroys phlegm, expels flatulence, induces costiveness, sharpens the memory, increases eloquence, excites the appetite, and acts as a general tonic."

The "Rajbulubha," a Sanscrit treatise of rather later date, alludes to the use of hemp in gonorrhœa, and repeats the statements of the "Rajniguntū." In the Hindu Tantra, a religious treatise, teaching peculiar and mystical formulæ and rites for the worship of the deities, it is said, moreover, that *sidhes* is more intoxicating than wine.

In the celebrated "Susruta," which is perhaps the most ancient of all Hindu medical works, it is written, that persons laboring under catarrh should, with other remedies, use internally the *bijoya* or *sidhes*. The effects, however, are not described.

The learned Kamalakantha Vidyalkanka has traced a notice of hemp in the 5th chapter of *Mennu*, where Brahmans are prohibited to use the following substances—*palandoo* or onions, *gunjara* or *gunjah*, and such condiments as have strong and pungent scents.

The Arabic and Persian writers are, however, far more voluminous and precise in their accounts of these fascinating preparations. In the 1st vol. of De Saoy's "Crestomathie Arabe" we find an extremely interesting summary of the writings of Takim Eddin Makrizi on the subject. Lane has noticed it too with his usual ability in his admirable work, "the Modern Egyptians." From these two sources, the MS. notes of the Syed Keramut Ali and Mr. DaCosta, and a curious paper communicated by our friend Mirza Abdul Razee, a most intelligent Persian physician, the following epitome is compiled:—

Makrizi treats of the hemp in his glowing description of the celebrated Canton de la Timbaliere, the ancient pleasure grounds, in the vicinity of Cairo. This quarter, after many vicissitudes, is now a heap of ruins. In it was situated a cultivated valley named Djoneina, which we are informed was the theatre of all conceivable abominations. It was famous above all for the sale of the *hasheesh*, which is still greedily consumed by the dregs of the populace, and from the consumption of which sprung the excesses which led to the name of "assassin" being given to the Saracens in the Holy Wars. The history of the drug the author treats of thus:—The oldest work in which hemp is noticed is a treatise by Hasan, who states that in the year 658, M. A. the Sheikh Djafar Shirazi, a monk of the order of Haider, learned from his master the history of the discovery of hemp. Haider, the chief of ascetics and self-chasteners, lived in rigid privation on a mountain between Nishabor and Ramah, where he established a monastery of Fakirs. Ten years he had spent in this retreat without leaving it for a moment, till one burning summer's day when he departed alone to the fields. On his return an air of joy and gaiety was imprinted on his countenance; he received the visits of his brethren and encouraged their conversation. On being questioned, he stated that, struck by the aspect of a plant which danced in

the heat as if with joy, while all the rest of the vegetable creation was torpid, he had gathered and eaten of its leaves. He led his companions to the spot,—all ate and all were similarly excited. A tincture of the hemp leaf in wine or spirit seems to have been the favourite formula in which the Sheikh Haider indulged himself. An Arab poet sings of Haider's *emerald cup*—an evident allusion to the rich green colour of the tincture of the drug. The Sheikh survived the discovery ten years, and subsisted chiefly on this herb, and on his death his disciples by his desire planted it in an arbour about his tomb.

From this saintly sepulchre the knowledge of the effects of hemp is stated to have spread into Khorasan. In Chaldea it was unknown until 728 M. E. during the reign of the Khalif Mostansir Billah; the kings of Ormus and Bahrein then introduced it into Chaldea, Syria, Egypt, and Turkey.

In Khorasan, however, it seems that the date of the use of hemp is considered to be far prior to Haider's era. Biraslan, an Indian pilgrim, the contemporary of Cosrões,* is believed to have introduced and diffused the custom through Khorasan and Yemen. In proof of the great antiquity of the practice, certain passages in the works of Hippocrates may be cited, in which some of its properties are clearly described, but the difficulty of deciding whether the passages be spurious or genuine, renders the fact of little value. Dioscorides (lib. ij. cap. 169), describes hemp, but merely notices the emollient properties of its seeds; its intoxicating effects must consequently be regarded as unknown to the Greeks prior to his era, which is generally agreed to be about the second century of the Christian epoch, and somewhat subsequent to the lifetime of Pliny.

In the narrative of Makrizi we also learn that oxymel and acids are the most powerful antidotes to the effects of this narcotic; next to these, emetics, cold bathing, and sleep; and we are further told that it possesses diuretic, astringent, and especially aphrodisiac properties. Ibn Beitar was the first to record its tendency to produce mental derangement, and he even states that it occasionally proves fatal.

In 780 M. E. very severe ordinances were passed in Egypt against the practice; the Djoneina garden was rooted up, and all those convicted of the use of the drug were subjected to the extraction of their teeth; but in 799 the custom re-established itself with more than original vigor. Makrizi draws an expressive picture of the evils this vice then inflicted on its votaries—"As its consequence, general corruption of sentiments and manners ensued, modesty disappeared, every base and evil passion was openly indulged in, and nobility of external form alone remained to these infatuated beings."

Medicinal Properties assigned to Hemp by the Ancient Arabian and Persian Writers, and by Modern European Authors.

In the preceding notice of Makrizi's writings on this subject, we have confined ourselves chiefly to historical

details, excluding descriptions of supposed medicinal effects. The Mukzun-ul-Udwieh and the Persian MS. in our possession, inform us as to the properties which the ancient physicians attributed to this powerful narcotic.

In Mr. DaCosta's MS. version of the chapter on hemp in the Mukzun-ul-Udwieh, *churrus*, we are informed, if smoked through a pipe, causes torpor and intoxication, and often proves fatal to the smoker. Three kinds are noticed, the *garden*, *wild*, and *mountain*, of which the last is deemed the strongest; the seeds are called *sheadana* or *shaldaneh* in Persia. There are said to be "a compound of opposite qualities, cold and dry in the third degree—that is to say, stimulant and sedative, imparting at first a gentle reviving heat, and then a considerable refrigerant effect."

The contrary qualities of the plant, its stimulant and sedative effects, are prominently dwelt on. "They at first exhilarate the spirits, cause cheerfulness, give color to the complexion, bring on intoxication, excite the imagination into the most rapturous ideas, produce thirst, increase appetite, excite concupiscence. Afterwards the sedative effects begin to preside, the spirits sink, the vision darkens and weakens; and madness, melancholy, fearfulness, dropsy, and such like distempers, are the sequel—and the seminal secretions dry up. These effects are increased by sweets, and combated by acids."

The author of the Mukzun-ul-Udwieh further informs us—

"The leaves make a good snuff for deterring the brain; the juice of the leaves applied to the head as a wash, removes dandriff and vermin; drops of the juice thrown into the ear allay pain and destroy worms or insects. It checks diarrhoea, is useful in gonorrhoea, restrains seminal secretions, and is diuretic. The bark has a similar effect."

"The powder is recommended as an external application to fresh wounds and sores, and for causing granulations; a poultice of the boiled root and leaves for discussing inflammations, and cure of erysipelas, and for allaying neuralgic pains. The dried leaves, bruised and spread on a castor oil leaf, cure hydrocele and swelled testes. The dose internally is one *diram*, or forty-eight grains. The antidotes are emetics, cow's milk, hot water, and sorrel wine."

Alluding to its popular uses, the author dwells on the eventual evil consequences of the indulgence; weakness of the digestive organs first ensues, followed by flatulency, indigestion, swelling of the limbs and face, change of complexion, diminution of sexual vigor, loss of teeth, heaviness, cowardice, depraved and wicked ideas; scepticism in religious tenets, licentiousness, and ungodliness are also enumerated in the catalogue of deplorable results.

The medicinal properties of hemp, in various forms, are the subject of some interesting notes by Mirza Abdul Razes. "It produces a ravenous appetite and constipation, arrests the secretions except that of the liver, excites wild imagining, especially a sensation of ascending, forgetfulness of all that happens during its use, and such mental exaltation, that the beholders attribute it to supernatural inspiration."

Mirza Abdul considers hemp to be a powerful exciter of the flow of bile, and relates cases of its effi-

* By this term is probably meant the first of the Sassanian dynasty, to whom the epithet of "Khusrow" or Cosroes, equivalent to Kaiser, Cæsar, or Czar, has been applied in many generations. This dynasty endured from A.D. 202 to A.D. 636.—*Vide note 50 to Lane's Translation of the Arabian Nights*, vol. ii. p. 226.

cacy in restoring appetite—of its utility as an external application as a poultice with milk, in relieving hæmorrhoids, and internally in gonorrhœa. A quarter of a drachm of *bangh* is given in water as the dose in gonorrhœa. He states, also, that the habitual smokers of *gunjah* generally die of diseases of the lungs, dropsy, and anasarca, “so do the eaters of *majoon* and smokers of *sidhee*, but at a later period. The inexperienced on first taking it are often senseless for a day, some go mad, others are known to die.”

In the 35th chapter of the 5th volume of “Rumphius’ Herbarium Amboinense,” p. 208, Ed. Amsterd. A. D. 1695, we find a long and very good account of this drug, illustrated by two excellent plates. The subjoined is an epitome of Rumphius’ article:—

Rumphius first describes botanically the male and female hemp plants, of which he gives two admirable drawings. He assigns the upper provinces of India as its *habitat*, and states it to be cultivated in Java and Amboyna. He then notices very briefly the exciting effects ascribed to the leaf, and to mixtures thereof with spices, camphor, and opium. He alludes doubtfully to its alleged aphrodisiac powers, and states that the kind of mental excitement it produces depends on the temperament of the consumer. He quotes a passage from Galen, lib. i. (de aliment. facult.), in which it is asserted that in that great writer’s time it was customary to give hemp seed to the guests at banquets as promoters of hilarity and enjoyment. Rumphius adds, that the Mahomedans in his neighbourhood frequently sought for the male plant from his garden, to be given to persons afflicted with virulent gonorrhœa and with asthma, or the affection which is popularly called “stitches in the side.” He tells us, moreover, that the powdered leaves check diarrhœa, are stomachic, cure the malady named *pitao*, and moderate excessive secretion of bile. He mentions the use of hemp smoke as an enema in strangulated hernia, and of the leaves as an antidote to poisoning by opium. Lastly, he notices in the two subsequent chapters varieties of hemp, which he terms the *gunjah sativa* and *gunjah agrestis*.

In the *Hortus Malabaricus*, Rheede’s article on the hemp is a mere outline of Rumphius’ statements.

Among modern European writers the only information I could trace on the medicinal use of hemp in Europe, is in the recent work of Nees v. Esenbeck, from which the following is an extract kindly supplied by Dr. Wallich:—

“The fresh herb of the hemp has a very powerful and unpleasant narcotic smell, and is used in the East in combination with opium in the preparation of intoxicating potions, &c. It is probable that the *nepenthe* of the ancients was prepared from the leaves of this plant. Many physicians, Hahnemann among them, prescribe the vinous extract in various nervous disorders, where opium and hyoscyamus used to be employed, being less heating and devoid of bitterness.”*

No information as to the medicinal effects of hemp exists in the standard works on materia medica, to which I have access. Soubeiran, Feé, Merat and de Lens, in their admirable dictionary; Chevalier and Richard, Roques (Phytophographie Médicale); Ra-

tier and Henry (Pharmacopée Française); and the Dictionnaire des Sciences Médicales, are all equally silent on the subject.

In “Ainslie’s Materia Indica,” 2nd vol., we find three notices of the plant and its preparations.

At page 39 “banghie” (*tamul*), with the Persian and Hindee synonyms of “beng” and “subjee,” is described as an intoxicating liquor prepared with the leaves of the *gunjah* or hemp plant.

Under the head *gunjah*, Ainslie gives numerous synonyms, and tells us that the leaves are sometimes prescribed in cases of diarrhœa; and in conjunction with turmeric, onions, and warm gingilie oil, are made into an unction for painful protruded piles. Dr. Ainslie also gives a brief view of the popular uses and botanical characters of the plant.

Majoon, lastly, is described by Dr. Ainslie, page 176, as a preparation of sugar, milk, ghee, poppy seeds, flowers of the datura, powder of nux vomica, and sugar. The true *majoon*, however, as prepared in Bengal, contains neither datura nor nux vomica. I have already described the process by which it has been manufactured before me.

In the “Journal de Pharmacie,” the most complete magazine in existence on all pharmaceutical subjects, we find hemp noticed in several volumes. In the “Bulletin de Pharmacie,” t. v. A. 1810, p. 400, we find it briefly described by M. Rouyer, apothecary to Napoleon, and member of the Egyptian scientific commission, in a paper on the popular remedies of Egypt. With the leaves and tops, he tells us, collected before ripening, the Egyptians prepare a conserve, which serves as the base of the *berch*, the *diasmouk*, and the *bernaouy*. Hemp leaves reduced to powder, and incorporated with honey or stirred with water, constitute the *berch* of the poor classes. The same work also (Bulletin, vol. i., p. 523, A. 1809) contains a very brief notice of the intoxicating preparations of hemp, read by M. De Sacy before the Institute of France, in July, 1809. M. De Sacy’s subsequent analysis of Makrizi, of which I have given an outline, is, however, much more rich in details than the article in the Bulletin.

Professor Royle in his admirable work, entitled ‘Illustrations of the Botany, &c. of the Himalayas,’ p. 334, gives a very brief notice of the synonyms and epithets of the hemp resin, and mentions its intoxicating properties, but affords us no information on its medicinal effects.

(To be concluded in our next.)

ON THE TREATMENT OF SYPHILIS WITHOUT MERCURY,

IN THE GENERAL HOSPITAL, VIENNA.

By Dr. LIBAY.

The result of the author’s experience in this establishment is in favor of the non-mercurial treatment. During seven months only a single case of secondary venereal occurred; the rest supervened on mercurial treatment, or were the result of neglected primary affection.

The number of patients admitted during the year 1840 was 1176; of these 998 were cured, one re-

* Handbuch der Medicin. und Pharmac. Botanik, von F. Ness von Esenbeck und Dr. Carl Ebermaier, vol. i., p. 338.

mained improved, 37 were transferred to other wards, and 4 died.

The following table indicates the relative frequency of the different forms, from October 1839 to April 1840 :—

10	Chancres on Prepuce.
131	Chancres on Glans.
2	Chancres on Scrotum.
33	Chancres with Phymosis
21	Chancres with Paraphymosis.
8	Chancres with Condylomata.
3	Chancres with Gonorrhœa.
85	Chancres with Bubo.
6	Secondary Eruptions on the Skin.
5	Secondary Eruptions on Mucous Membranes.
1	Secondary Symptoms in Bones.
47	Balanitis.
52	Gonorrhœa confined to Urethra.
52	Urethral Gonorrhœa with Hernia Humoralis.
24	Gleet.
1	Strictures.
9	Condyloma on Glans.
60	Condyloma on Nates and Scrotum.

I. *Primary Chancre and its Treatment.*—There can be no doubt but that the primary symptoms of syphilis are now much milder than they were some thirty or forty years ago; and hence the distinction of real from pseudo-syphilitic ulcer is more difficult. Some rely on the external characters of the ulcer, others affirm that the only certain test is inoculation; but as the latter and more certain proof cannot be readily obtained in private practice, it becomes a matter of great importance to ascertain some character on which to found an opinion of the nature of the disease, or at least of the probable occurrence of secondary symptoms. This character Dr. Ratter finds (and my experience confirms, with very few exceptions, his remark) in the nature of the inflammation which accompanies the sore. The more acute the symptoms of this inflammation are—the quicker they terminate in destruction of substance—and the deeper the sore penetrates—the more likely is it to be followed by secondary symptoms.

The most common seat of chancre was the edge of the glans, then the inner surface of the prepuce, and finally the glans itself; in a few cases it occupied the frænum, and in one only the orifice of the urethra.

The most frequent complications were inflammatory or congenital contraction of the prepuce, paraphymosis, bubo, and condyloma. The period at which bubo supervened was within the first fortnight after the development of the primary sore; for we never had occasion to witness the occurrence of this complication after the twenty-first day. The period of healing of the sore varied from three to six weeks. Corroding, sloughing chancres on the edge of the glans, or on the glans itself, healed quickest; those seated on the outer fold of the prepuce were the longest in healing. It was particularly remarked, that after the termination of the ulcerative period, the healing of chancre when once commenced proceeds in a very rapid manner. We had frequent opportunities of seeing that the primary sore loses, after an uncertain period, the power of propagating the disease, and according to our observation this takes

place within four or five weeks. In cases where congenital phymosis renders the healing of the sore very tedious, excoriations are apt to occur on the prepuce, but the pus of the original sore lay in contact with these wounds, without affecting them in the slightest manner.

The chief points in the treatment are—1, destruction of the specific character of the sore by cauterisation; 2, careful attention to cleanliness; 3, the avoidance of sudden changes of temperature; 4, rest; and, 5, the frequent use of purgatives.

As a general rule, all chancres were cauterised up to the fourteenth day after their first appearance. The excepted cases were those in which the inflammation ran very high, or where the sore was of a corroding or sloughing character; for here nature does the work for us. Cases were also excepted, where the chancre was accompanied by inflammatory phymosis, paraphymosis, or bubo; for experience shows that, with respect to the latter complication, the sore undergoes a change on the appearance of bubo, and assumes the character of a simple ulcer; while it is unnecessary to state the reasons for abstaining from cauterisation in cases of phymosis, &c. The cautery always used was the nitrate of silver; and it seems unnecessary to remark that the extent and frequency of its application must depend on the appearance of the sore, and the influence which the caustic may exert on it.

In a few cases where the sore presented the Hunterian character, with clean-cut edges, excavated appearance, and dirty-looking base, Judd's method of applying calomel to it was employed with advantage. Where the sore was very long in healing, red precipitate was used; and in cases where it was florid and bled readily, a solution of sulphate of copper (one drachm to one ounce) was had recourse to with advantage.

Experience shows that ulcers from other infectious matters are best combated by the cautery, and the same remark equally applies to syphilitic primary sores; and it is fully proved, that the more quickly the primary sore is healed the less have we to dread the occurrence of secondary infection.

It cannot, indeed, be denied that secondary symptoms occasionally occur after the use of the caustic; but as long as we have no mode of treatment which will effect this in a certain manner, we are not to lay much stress upon these few exceptions.

Cleanliness of the body, and of the affected parts especially, is also very conducive to the cure. For these purposes the patients had a local tepid bath every two hours, and a general one every second day; unless the period of cauterisation happened to interfere with the former. Experience proves that the influence of temperature depends, not so much on heat or cold, as on the keeping up a regulated and equable temperature.

Quietness and rest in the horizontal position, though often neglected, are indispensable, especially for the prevention of bubo. All our patients were confined strictly to bed during the first three weeks of the treatment.

Low diet is also an indispensable adjuvant to the non-mercurial treatment of syphilis. Hence the patients were restricted to low diet during the first two or three weeks. A cup of soup was given thrice a day, and some broth once, with a single roll of bread.

When the patient was old or enfeebled by previous use of mercury, &c., better diet was allowed according to circumstances. In cases of bubo the quantity of food was increased, after opening the tumor; and when the healing process commenced animal food was first permitted.

A mild purgative of saline mixture was administered every two or three days, aided by a few grains of jalap in cases where the bowels were constipated.

Treatment of Complications.—Phymosis, occurring as a consequence of inflammation in a moderate degree, was treated antiphlogistically. In most cases of this kind the phymosis was cured by the use of warm lotions and the tepid bath. When the inflammatory symptoms, however, were more severe, and seemed to threaten mortification, the main reliance was placed on cold applications; the use of leeches was of little service. When a portion of the prepuce had already sloughed, the separation of the mortified parts was left to nature, and the healing promoted by a gradual change from cold to tepid local applications.

Paraphymosis of short duration, and accompanied by slight inflammation, yielded to pressure with the fingers; but in more severe cases the greatest benefit was obtained from the application of ice-cold lotions.

As to the use of the knife in any cases of paraphymosis, I regard it to be both superfluous and useless. Superfluous, because the stricture has been overcome by the use of cold in many cases where division was thought necessary; and useless, because the operation is inapplicable to such cases where the stricture is produced by the inner layer of the prepuce embracing the edge of the corona glandis.

Inflammation of the lymphatic glands is always an unpleasant complication. As a primary symptom without previous chancre I saw only one example; this occurred fourteen days after unclean connection, and no ulcer or trace of ulcer could be detected.

The treatment of bubo consisted in rest, the use of fomentations, purgatives, and compression. According to my experience the most efficacious means are rest and the horizontal position, next to fomentations and purgatives. Warm emollient fomentations were preferred to cold. As compression was used in conjunction with many other means, it is not easy to estimate its real value.

Suppurating bubos were opened by incision in the long diameter, and then treated as simple abscesses, being carefully protected from the air. When granulation commenced, this process was aided by a lotion, or touching the part with lunar caustic, or an ointment containing fifteen grains of red precipitate, and two drachms of tincture of opium to two ounces of lard. When the integuments were extensively detached, thinned, and livid, the Vienna caustic was employed to open the bubos. When the tumor is opened in proper time it generally heals within twenty-one days; if the incision be made before fluctuation is evident, the edges of the wound are apt to become everted and callous, and it is subsequently necessary to pare its edges with the knife or cut them down with caustic; on the other hand, if the opening be delayed too long, we have to apprehend sloughing or burrowing of the pus under the integuments.

Indurated bubo, arising from external causes during gonorrhœa, required the persevering use of iodine or

some of its preparations. I saw only one example of bubo resulting from condyloma. A patient, twenty-three years of age, had several pedunculated condylomata on the glans; these were removed by the knife and by ligature; a bubo ensued and was opened with the bistoury; the wound, however, soon degenerated into a deep ulcer, with hard edges and uneven unhealthy base. It extended to the scrotum and perineum, then to inner surface of the thigh, and continued, in spite of treatment, for six months. On the following summer, while the treatment consisted in tepid baths, fomentations, and the local application of lunar caustic, the ulcer suddenly took on the healing process and soon cicatrised.—*Med. Jahrbücher*, Nov., 1842.

PRACTICAL OBSERVATIONS ON DISEASES OF THE SKIN.

By THOMAS H. BURGESS, M.D., &c.

No. III.

ERUPTIONS OF THE FACE.

Sycosis.—The history of sycosis or mentagra naturally follows that of *acne*, described in the preceding paper, inasmuch as it is a disease peculiar to the face, of an obstinate and rebellious character, and possesses many symptoms in common with that eruption. Indeed, some dermatologists seem to regard sycosis merely as a variety of *acne rosacea* (*couperose*) both being the result of a lesion of the follicles, and this view is in a manner supported by the circumstance of these diseases being pustular, and their anatomical seat apparently the same. For example, *acne* is produced by inflammation of the sebaceous follicles, and sycosis is pretty generally admitted to be the result of inflammation of the piliferous follicles; hence those who believe in the identity of the diseases in question say, that wherever one of these follicles is found the other is also present, and is equally involved. But this view of their identity is not correct, for sycosis is in reality the result of lesion of the piliferous tubes, in which the hair is encased as in a sheath, an opinion that has been fully substantiated by Bielt and Cazenave. Moreover, these eruptions are further distinguished by the tubercular indurations of sycosis, showing that the subcutaneous cellular tissue is much involved, and especially by the absence of hypersecretion of the sebaceous follicles, one of the principal phenomena of *acne*. In a word, sycosis is a pustular disease characterised by an eruption of accumulated pustules, although at a certain stage of its course, and under certain circumstances, it assumes a tubercular appearance.

Its seat is principally the chin, but it may appear wherever the beard grows, and it occurs most frequently in persons whose beard is thick and shaggy. The disease generally occurs in those parts of the face covered with hair, in the form of an eruption of small accumulated and painful pustules, especially on the chin, frequently on the upper lip, and sometimes along the maxillary region. Although, in some rare instance, this eruption runs its course pretty rapidly, and terminates in ten or fifteen days, it commonly assumes a chronic form—for example, a number of small pimples without any definite character, may

appear and disappear repeatedly for several weeks, and even for months, until at length a true pustule makes its appearance. This generally breaks about the third or fourth day, and is succeeded by a small scab, which in its turn falls off and leaves no traces behind. Another pustule now makes its appearance, and pursues the same course; and, finally, a number of pustules are evolved, accompanied by a painful sensation of tension, and redness sometimes strongly marked. The scabs increase in volume, become blackish, adherent, and when they do fall off are replaced by new pustules. The inflammation now extends to the adjoining tissues, slight tubercular engorgement ensues, and the disease assumes the appearance of a true tubercular affection. But we know that these tumors are not elementary, that they have succeeded the pustular eruption, that they are, in short, merely a secondary or consecutive lesion.

However, if the disease should still continue to pursue its course uninterrupted, the tubercular indurations increase, and finally become true nodosities. The face is then greatly disfigured, the chin is puffy and swollen, and studded with tumors not unlike cherries in appearance, imparting to the countenance a peculiarly repulsive aspect. The inflammation may extend still more deeply into the cutaneous tissue, so as to produce abscesses, and then it is that we find syco-sis complicated with the pustules of impetigo to such a degree as almost to disguise the original disease. When the eruption continues for some time, the bulbs participate in the surrounding inflammation, the hair is easily detached, sometimes falls off, some parts altogether, but it always grows again, and returns to its natural condition after a certain period.

The seat of syco-sis, as already observed, may be the chin, maxillary region, eyelids, or upper lip. Sometimes it appears in the form of a single pustule on the nose, which goes through the usual course of the disease.

Its duration is very variable. It may resist every plan of treatment, and continue for an indefinite period in spite of the best directed remedial measures. The tubercular elevations will attain a considerable size if no treatment be employed; and especially, if the patient tears off the scabs at the summit, which he is likely to do from the itching of the parts, they will assume a livid color and extend over the chin, and even on to the cheeks. The tubercles are then so numerous and so large that the chin is more than double the natural size, and has an extremely repulsive appearance. When the disease shows a disposition to cure, the tubercles insensibly diminish in number and size; the scabs fall off, the pustules are less frequently renewed, and also diminish in number—in short, all the symptoms lose their intense character, and the eruption finally disappears. But red and violet colored patches frequently remain behind, especially when the duration of the disease was very prolonged, and slight epidermic exfoliation occurs in these parts.

Syco-sis never attacks females, and very rarely old people, and this may be considered as a special character of the eruption. Those persons who have a thick and shaggy beard are much more predisposed to it than others. Some writers are of opinion that syco-sis is a contagious affection, in consequence of

its having been transmitted from one person to another by using the same razor. M. Foville relates a case in support of this view, in which the disease attacked several of the patients in the lunatic asylum at Rouen from the use of a soiled razor. But it was an isolated example, and as the same occurrence did not take place again in the asylum under similar circumstances, it can only be looked upon as an accidental coincidence, and not as an argument in favor of the contagious nature of the disease under consideration.

There is evidently an individual predisposition in some persons to this eruption, which may be excited by occasional and accidental causes, as for example, the irritation produced by a blunt razor will suffice in such instances to produce syco-sis. Amongst the exciting causes we may also mention the too free use of intoxicating liquors, uncleanly habits, &c. The seasons, also, seem to have considerable influence on the development of the disease, especially spring and autumn; and as a general rule it occurs most frequently in adults, especially those of a sanguineous and bilious temperament.

Syco-sis is always easily distinguished from every other affection, unless it be complicated with the pustules of impetigo, in the event of which some attention and tact are necessary to discover the nature of the elementary disease. There are, however, certain diagnostic signs characteristic of each eruption, sufficient to prevent their being confounded together. For example, the impetiginous pustules are not prominent, but flattened and partly incrustated together whenever those of syco-sis are accumulated and distinct. The scabs of impetigo are broad, thick, and yellow, whilst the incrustations of syco-sis are brownish and dry. When acne is developed on the chin it bears some resemblance to syco-sis, but by bearing in mind that the pustules of the former are more superficial and inflammatory; that they do not suppurate completely; that the tubercular indurations are less pronounced; and finally, that the special character of acne—namely, hypersecretion of the follicles, is wanting—a mistake of this kind may be avoided.

In like manner, a knowledge of the general characters of syco-sis, already enumerated, will prevent that disease being confounded with the tubercular or pustular syphilitic eruption. Syco-sis is an obstinate affection and subject to frequent relapses; hence, it is necessary to be cautious in giving a prognosis, and especially in promising a speedy cure.

Treatment.—The treatment of this disease is often difficult and unsatisfactory, from the rebellious character it assumes, and sometimes it will baffle, for a considerable period, the best directed and most judicious remedial measures. In the acute stage, emollient cataplasms, employed every evening for a fortnight or three weeks, will be the most appropriate treatment that can be adopted. Cauterisation with the nitrate of silver is much recommended by M. Devergie in the tubercular form of the disease, together with the repeated employment of the vapor douche. A course of mild laxatives will also be serviceable as an adjuvant during the local treatment; and M. Bielt was in the habit of employing emollient baths, containing a certain quantity of bran, starch, or gelatine. M. Cazenave entertains an opposite opinion to that of

M. Devergie regarding the utility of cauterisation, blisters, &c., in the treatment of sycosis. M. Caze-nave alleges that he never found any beneficial results to be derived from the application of these remedies.

When the disease assumes a chronic character, emollient applications are the most appropriate remedies to begin with; and after continuing these for a certain period, the duration of which will depend on the degree of severity of the disease, the best effects will often result from the judicious employment of the vapor douche. Mild laxatives, as the sulphates of potass or soda, should be occasionally administered during the treatment, and the administration of vegetable tonics or bitters will also tend to promote a cure. If this plan of treatment, however, should fail, we must then have recourse to certain topical remedies, the employment of which would not be judicious at any earlier period of the disease. These are ointments of tannin, of carbonate of lead; the sulphur ointment, so injurious in the acute forms of sycosis, may now be used with advantage; the iodine ointment, ointment of the proto-ioduret of mercury, or the red precipitate ointment. At the same time that these applications are used externally, the patient should take the sulphur waters internally and use the sulphur bath, if practicable. The ointments of the proto-ioduret of mercury and of the ioduret of sulphur should contain two grains of the salt to thirty grains of lard. If there is much local irritation present, the application of leeches behind the ears or under the chin will be attended with benefit; and if the employment of the local remedies above indicated produce a new eruption in greater abundance than ever, a circumstance which sometimes occurs, the treatment should be suspended, and the new symptoms attacked by the repeated applications of the vapor and alkaline douche.

London, Jan. 16, 1843.

TWO CASES

OF

COMPOUND FRACTURE OF THE LEG.

By JONATHAN TOOGOOD, Esq.,

Senior Surgeon to the Bridgwater Infirmary.

CASE I.—Mr. A., aged fifty-five, was thrown from a gig on Thursday, and suffered a compound fracture of the leg. I found him lying on the road, about a mile from his house, bleeding profusely. He was carefully carried home on a hurdle, when I discovered that the lower end of the tibia was dislocated and considerably displaced, the fibula fractured, and about four inches above both bones were broken, the tibia protruding through a wound two inches in length. The tibia and fibula were again both broken a little below the knee. The reduction of the dislocation was very difficult, and it was impossible to keep the end of the tibia, which had passed through the skin, right, in consequence of the complete detachment of the bone by the upper fracture. The broken ends of the bones were placed in apposition, as well as the case would admit, the leg put up into splints, and cold applications directed. It became a point of serious consideration whether amputation would not be the safest course under such complicated injury. The patient was fifty-five years of age, and, with the

exception of being subject to nervous and spasmodic affections, of a sound constitution and temperate habits; the soft parts, although much lacerated, were not contused, and he was in a situation possessing every convenience for cure. These circumstances induced me to hope that the first symptoms would not be such as to endanger his life, and that if the suppuration was not excessive the limb might be preserved; I therefore felt justified in the attempt to save it.

Thursday night, Ten o'clock. He is restless and uneasy, complaining of great pain and starting of the limb, oppression and anxiety about the præcordia, with sickness and frequent tendency to evacuate the bowels. He took forty drops of laudanum, and afterwards an effervescing draught every four hours. The pulse 60, with but little heat of skin. He got a little sleep during the night, and was much the same on the following morning, but complained of pain in making a deep inspiration; he still complained of tenesmus, and could not pass any water. The catheter was introduced with great relief. He continued in the same state during the day, the pulse varying from 60 to 68; but in the evening the oppression and languor was much increased, and the tongue became very dry. The wound looked pale and weak, and there was much discoloration of the foot, particularly of that part where the pressure necessary for the reduction of the dislocation had been made. The limb was well fomented; fifty drops of laudanum were given in some Madeira and water, and an injection administered, which was repeated at three in the morning, having been extremely restless, and without sleep. Immediate relief followed; he became comfortable and slept.

He passed the whole of the following day (Saturday) better; the same treatment was pursued, with the opium and wine; and he took chicken broth and beef tea.

Sunday. He complained of being very low, but all the other symptoms proceeded favorably.

On Monday the limb looked well, and there was a slight appearance of suppuration; his countenance and general state were improved, and he took some nutritive food with relish. The heat of this day was oppressive, the thermometer standing at 90 in the shade, and in the evening he was excessively low, and his voice so weak that he could scarcely be heard. A full dose of opium in Madeira procured a good night, and he passed the next day (Tuesday) well. Cordials and tonics were prescribed, and in the evening there was a sufficient discharge of healthy matter from the wound. The bladder recovered its power on the eighth day and everything went on favorably until the twelfth, excepting that no evacuations could be procured by glysters, but on that day the wound became dry. On the following evening, after passing the best day since the accident, violent spasms and shooting pains came on, affecting the leg, and particularly the muscles on the inside of the thigh. These spasmodic twitches recurred frequently for many days, affecting the muscles of both legs, body, arms, and face. They generally came on as he was going to sleep, and sometimes awoke him from sound sleep. The granulations looked flabby; the wound was exquisitely tender, and presented a marbled puffy appearance. These symptoms excited some apprehension that tetanus may

supervene, but after many days of anxious suspense they subsided. He did not, however, regain his strength for several months, but at length he got quite well, and had the perfect use of his limb without any lameness.

Some difficulty arose in passing the catheter from the position of the patient, and still greater in preventing the urine from running about the bed, which inconvenience was remedied by inserting the point of one elastic catheter into the mouth of the other. By thus lengthening the tube and bending it over the thigh, the contents of the bladder were received in a basin, and future discomfort avoided.

CASE II.—A robust young woman was thrown from a horse, and suffered a compound fracture of both bones of the leg, about three inches above the ancle. Nine months after the accident she was placed under my care. The fibula only had united, and a piece of detached bone was wedged firmly between the broken ends of the tibia, which prevented any union. Her health had suffered much from long confinement, and amputation had been proposed, which she refused, but was willing to submit to any treatment which offered a chance of restoring her limb. I divided the integuments over the tibia to the extent of four or five inches, and sawed off the ends of the bone with Mr. Hey's saw, which enabled me to remove the intervening portion. The operation was more tedious than painful. In the evening she was attacked with erysipelas, which spread rapidly over the thigh and leg, and was accompanied with constant sickness and vomiting. Half a grain of opium with an effervescing draught every two or three hours, allayed the irritation of the stomach, and the application of a spirituous lotion lessened the inflammation of the limb so much, that in two or three days the immediate effects of the operation had subsided. The wound soon healed, but there was a very considerable space between the ends of the tibia, and the limb was still useless. A case made to fit the leg, of the same kind of leather as is used for the flaps of saddles, strengthened by some narrow plates of iron, and fastened under the knee and around the ancle, was applied, which supported the limb so effectually that she was soon able to walk about with the assistance of a stick only. The ends of the bones gradually approximated each other, so as to form a firm union and give her a useful limb.

CASE

OF

NEURALGIA OF THE INFERIOR DENTAL NERVE.

By JOHN WATERS, M.D.

A lady, aged about forty, of an anxious temperament, came to town last August to consult me concerning an affection of the lower maxilla, from which she had been suffering during the last three years. She described it as coming on slowly at the time mentioned, and considered the pain as the result of toothache; but on consulting her medical attendant, he pronounced it to be a case of neuralgia of the inferior dental nerve. She underwent a variety of treatment, but with little or no permanent effect; tried change of air, but to no purpose; and had six or

seven teeth extracted, in the hope of experiencing relief, and also as some suspicion was entertained that the fang of a tooth might be diseased. Her sufferings still continuing on the increase, at the recommendation of a friend, whom I had attended some short time before, she came to London to see me.

Her general health seemed much impaired, from the excessive anxiety that she had been laboring under so long; countenance expressive of anxiety; catamenia regular; appetite in general not impaired; not subject to headache; never had rheumatism, but had considerable anxiety and fatigue in her attendance on her husband previous to his death; the pain, which was of the most excruciating nature, was solely confined to the ramus mentalis of the inferior dental nerve as it issues from the foramen, and could be almost covered with the point of the finger, but about two years previously it extended along the entire course of the nerve; there was no swelling, heat, or discoloration of the part, except a slight thickening of the skin from the different topical remedies that were previously applied, and the incessant friction and pressure that she made use of to allay the paroxysms of pain; there was no permanent muscular contraction. When I first saw her the pain was so incessant (coming on about every three or four minutes) that her hand was continually pressing the part; she described it as an insupportable dragging pain, a kind of electric commotion, which, without precursory signs, arrived at its maximum of intensity, and as suddenly departed; and sometimes these lancinating pains arrived so rapidly at their highest degree of development that she was forced to scream aloud; at each attack there was an involuntary movement of the whole body, but pain was only felt in the part described. She had tried the different preparations of iron, morphia, veratria, blisters, leeches, and the usual category of remedies employed in similar cases, without experiencing relief. Prescribed the following pills:—

Strychnine, one grain and a half;
Ioduret of iron, twenty-four grains;
Extract of conium, twenty-four grains. Mucilage enough to make into twelve pills; one twice a-day.

Also applied a small blister over the foramen mentale, and dressed the abraded surface with the following ointment:—

Hydrochlorate of morphia, sixteen grains;
Suet, one ounce;
Hydrochloric acid, three drops. An ointment to be applied thrice a-day.

On continuing this treatment for a week, I was obliged to administer the pills but twice in the day, as the twitching from the strychnine was much complained of. She described the pain as now totally changed since she felt the twitching in the affected nerve, been more lancinating, but the intermissions were longer and the duration of pain somewhat abridged. She also took five grains of diluted sulphate of quinine each day at noon.

Extract of aloes, fifteen grains;
Sulphate of quinine, twenty grains;
Sulphate of iron, eight grains;
Dilute sulphuric acid, eight drops. Make into eight pills; one twice a-day.

Having continued this treatment for fifteen or sixteen days with little improvement, I detailed the case to my friend Dr. Hennis Green, and on his recommendation I adopted the following treatment, which was eminently successful:—

I gave the arsenical solution twice in the day, commencing with five drops, and gradually pushed it to forty. On the sixth day there was a marked diminution in the paroxysms, and the pain was now so much mitigated that she ceased to press or rub the part as she was accustomed to do during the paroxysms; her general health began to improve; sleep not disturbed; and within the month from the time of commencing the treatment she was entirely free from pain; and last week I received a letter from her, wherein she states that there has not been a single recurrence of it.

62, Torrington-square,
Dec. 15, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JANUARY 28, 1843.

In our last Number we published an important letter from Mr. R. Cartwright, Secretary to the Shropshire Medical Association. We call this document an important one, inasmuch as it furnishes evidence that medical practitioners are at length becoming sensible of the truth conveyed in the ancient, though by them long-neglected maxim, "Union is strength." There is no class of men for the protection of whose interests unity of purpose and action is more imperatively requisite than the members of the medical profession; yet our want of union in public and the discords which distract us in the relations of private life have become almost proverbial. It were easy to trace the causes of this absence of harmony to their real source. Medical men are not of themselves more disposed to jealousy and strife than other classes of the community; their faults are not of their own creation; they have been forced on them by the vicious constitution under which we live—by the selfish views of the medical corporations. Instead of working together for the common good, and endeavouring to reconcile conflicting interests, the corporate and chartered bodies study exclusively their individual interests, leaving the commonwealth of medicine to look after itself. This selfish and short-sighted policy is daily becoming more prevalent; it has extended from one extremity of the land to the other. In the North we have an ancient university conferring degrees for the sum of twenty-five shillings; in the South we establish a counterpoise by deteriorating the quality of the material to the lowest standard. Surgeons are now sent forth from Lincoln's Inn something after the fashion of printed goods from Manchester. Without

the slightest regard to the state of the market, or the least consideration for the quality of the article supplied, surgeons and stuffs are manufactured merely to keep the mill going. Hence are we like lean kine, ready to devour one another. Physicians and surgeons, emanating from different sources, and forced to submit to the factitious distinctions imposed on them by their respective governing bodies, are on about the same terms of friendship as cat and dog. The practice of medicine is cast between them as a bone of contention.

The surgeon, again, looks with jealous eye on the general practitioner, while the apothecary wages open and deadly war on his neighbour the druggist. Even the sub-species of doctors, surgeons and apothecaries, are split up into factions and arrayed against each other. Glasgow and Edinburgh are as much opposed to each other in the manufactory of doctors as Calais and Boulogne ever were in the importation of passengers. The holder of a certain Scottish degree is treated almost as a Jew. Oxford and Cambridge, indeed, seem resigned to their fate; but the Pall Mall serpent, like the Egyptian one of old, has suddenly raised up its head, and threatens to devour all competitors.

Under such a state it is impossible that anything save discord should prevail in the medical profession. We therefore look with exceeding satisfaction at any signs which indicate that medical men may be induced to unite together for the redress of injury or the attainment of good.

The successful opposition of the united profession in Ireland to the scheme of the poor-law commissioners is an encouraging example of what may be effected by zeal and unanimity in a good cause; and we look with almost equal pleasure on the union of the Shropshire practitioners in the assurance offices affair. Of 115 medical practitioners resident in Shropshire, no less than 112 have signed a pledge "not to answer the inquiries of assurance offices unless accompanied by a fee of one guinea."

We have already expressed *our own* opinion upon this point, and shall not recur to it here; one sentence, however, of Mr. Cartwright's letter contains a hint which may lead to a satisfactory adjustment of the question. It is conceded on all hands that the medical man should be paid for his certificate; but the rub is, who is to pay him? One party say the assurance offices, the other would throw the onus on the person applying for the certificate. With this paltry dispute the medical practitioner is mixed up in an unnecessary and unseemly manner. The question should be settled between the office and the applicant. Let every one who makes an application to an assurance office be compelled by the company to deposit the sum of one guinea for the purpose of obtaining a medical certificate, and let the offices arrange with

their customers whether the whole, or any part, of this sum is to be paid by the proposer.

We can see but few objections to an arrangement of this kind, and we conceive that medical men may take some such "pledge" in perfect fairness and with due regard to the dignity of the profession.

May the Shropshire men increase and multiply; they shall have, henceforward, our hearty co-operation.

REVIEWS.

On a Peculiar Displacement of the Bones of the Fore-arm in Children. By JOHN GARDNER, Surgeon. 8vo., pp. 8.

The object of this pamphlet is to bring "under the notice of compilers of systems and cyclopædias" a discovery which the author fancies he made, and which he published in the "Medical Gazette" for September, 1837. That the nature of the injury which forms the subject of Mr. John Gardner's pamphlet was totally unknown to the profession previous to his discovery of it, the author concludes on no other grounds than because Mr. Guthrie and Mr. Hale Thompson knew nothing whatever about it.

The idea of having "discovered" something seems to be so agreeable to Mr. Gardner, that it is with regret we undeceive him; but we are compelled to assure him that he has no claim whatever to the discovery in question, and that if it is to be recorded in "cyclopædias" the honor must be attributed to another.

The accident, on the description of which Mr. Gardner founds a claim of discovery, in no way belonging to him, occurs in children of tender years, and probably consists in partial dislocation of the superior extremity of the radius. It was carefully described by M. Goyrand, in the "Gazette Medicale de Paris" for February 25, 1837, who notices every one of the circumstances subsequently pointed out by Mr. Gardner.

The following is M. Goyrand's account of this accident, which, after the example of Mr. Gardner, we publish for the benefit of "compilers:"—

"According to my views, this accident consists in an incomplete luxation of the radius forwards, and occurs frequently in children from eighteen months to three years of age. At this period of life children are very subject to falls, and people often endeavour to save them by dragging the child by the hand, or they lift the infant by the hand over the gutter. The upper extremity in a state of pronation is thus made to support the whole weight of the body. The articular surfaces at this age are united in a feeble manner; there is no ligament from the humerus to the radius, and the external lateral ligament is merely inserted into the external edge of the annular ligament. The corresponding surfaces between the radius and the small head of the humerus are slightly separated from each other, while at the same moment the biceps brings the superior extremity of the radius forwards, and the other muscles which pass from the humerus to the radius draw up this latter bone, and displace it

slightly on the small head of the humerus. It is impossible to say what the precise extent of the displacement may be, but it must be very insignificant, for there is no change whatever in the external appearance of the elbow-joint.

Immediately on the occurrence of the accident the child experiences acute pain in the joint; the hand is forcibly pronated, and the limb is completely immovable; when any attempt is made to move the elbow-joint the child cries out immediately. There is no tumefaction or deformity of the joint.

The results of this accident are trifling; it is a very frequent one, though often mistaken and treated as a sprain. The displacement may be reduced with the greatest ease. The surgeon grasps the affected joint with the left hand, taking care to press the thumb on the head of the radius; with the other hand he extends the child's forearm, brings it supine, and then, pressing on the head of the radius, he flexes the forearm suddenly. During the manœuvre the surgeon hears distinctly the crack which results from the restoration of the articular surfaces to their natural state; and as soon as this takes place the little patient immediately recovers the use of his limb."

The preceding observations of M. Goyrand are nearly identical with those published seven months afterwards by Mr. Gardner. The similarity may be accidental; at all events, "compilers" will know the true history of this accident; and Mr. Gardner, like many others, has published his pamphlet *en pure perte*.

ACADEMY OF SCIENCES, PARIS.

January 16, 1843.

CARBONIC ACID EXHALED DURING RESPIRATION.

M. Andral read a memoir on the quantity of carbonic acid exhaled during respiration. The following are the conclusions at which the author arrives:—

1. The quantity of carbonic acid exhaled in a given time by the lungs, varies according to the age, sex, and constitution of the individual.
2. In both male and female this quantity varies with the age, and the variation is independent of the weight of the individual.
3. At every period of life from eight years to advanced old age, the quantity of carbonic acid exhaled from the lungs of the male in a given time is, *cæteris paribus*, always more considerable than that furnished by the female. This difference is particularly well marked between the ages of sixteen and forty, during which period the male exhales nearly twice as much carbonic acid as the female.
4. In the male the quantity gradually increases from eight to thirty years, and it is increased suddenly and in a considerable degree at the period of puberty. After the age of thirty the quantity of carbonic acid begins to decline, and the decrement is greater in proportion as extreme old age approaches; so that, at the latter period, the quantity may fall to what it was at the age of ten years.
5. In the female the exhalation of carbonic acid follows the same law of increment during the period of childhood; but as soon as menstruation com-

mences, the increase of this exhalation is suddenly arrested, and it remains stationary during the period over which the function of menstruation extends. When the woman ceases to menstruate, then the exhalation is suddenly and remarkably increased, and it then declines with old age as in the male.

6. During the whole period of pregnancy the exhalation of carbonic acid is raised to the standard peculiar to women at the critical period of life.

7. In both sexes and at all ages the quantity exhaled is great in proportion to the strength of the constitution and the development of the muscular system. This fact is confirmed by experiments of a different kind, showing that weakness of the constitution produced by disease is attended by diminution in the quantity of carbonic acid exhaled.

The considerable variations now noticed do not depend only, as might be thought, on the differences in the capacity of the chest.

TUBERCLES OF THE LUNGS.

Mr. E. Boudet having examined consecutively and without selection, the bodies of a great number of persons in the Parisian hospitals (many of whom died from accidents, &c., in the midst of apparent health) arrives at the following conclusions:—

In children, from one day to two years, tubercles are found in the lungs, or bronchial glands, once in 57 cases.

From two to fifteen years they exist in three-fourths of the cases (33 in 45).

From fifteen to seventy-six in six-sevenths of the cases (116 in 135); in other words, 6 out of every 7 patients had old or recent tubercles in the lungs. This result, which, at first sight, seems almost incredible, the author explains in the following manner:—The tubercles were, in many cases, few in number and limited in extent; and, in a great number of cases, so transformed as to exercise little influence on the general health.*

In infancy this fortunate termination of pulmonary tubercle is rare; the author did not see an example before the age of three years. From three to fifteen he saw 12 examples in 45 cases; from fifteen to seventy-six he saw examples of the cure of pulmonary or bronchial tubercle in 97 cases out of 116; and in 61 of these 97 cases the cure seemed to be definitive, and the rest of the lung did not contain a single recent tubercle.

The favorable changes which occur in pulmonary tubercles are—

1. *Isolation*.—The tubercular deposit, without being much changed in its nature, is isolated from the surrounding parts by a mucous, fibrous, or fibro-cartilaginous membrane.

2. *Induration*.—This occurs in three ways; *a*, the tubercle becomes dry and friable; *b*, it becomes dense and tenacious, though not dry to the touch; *c*, it passes into a calcareous state.

This latter termination, which appears to me to be clearly demonstrated, is very remarkable.

The concretions contain, in 1000 parts, 697 of chlo-

ride of sodium, and sulphate of soda, and a small quantity of the carbonate and phosphate of lime.*

3. *Transformation into black pulmonary matter*.

4. *Absorption*, complete or incomplete.

5. *Elimination through the bronchia*.

The various transformations of tubercular deposit, just mentioned, and which may occasionally be observed in the same individual, occur at every period of the development of tubercle; but one or more peculiar modes of transformation generally belong to each period of tubercular development. Thus, the crude yellow tubercle may be hardened, or absorbed, but it never passes into the soft calcareous state, and so on.

Tubercular excavation of the lung is occasionally susceptible of cure. In 197 cases, taken indiscriminately, the author found 10 examples of cavern completely cicatrised, without any trace of recent tubercle; and 8 examples of the complete or partial cure of cavern, coinciding with recent tubercles. Pulmonary caverns are healed by the organisation of accidental mucous membrane, or a fibro-cartilaginous envelope. They may rest open; but when they are obliterated they contain transformed tubercular matter, or a fibrous band indicates the seat of their previous existence.

The cases of persons who have recovered, after having presented the signs and symptoms of pulmonary consumption, prove that this terrible disease is not so invariably fatal as is generally supposed. In less than a year the author collected 14 cases of this kind, in 6 of which the existence of caverns or softened tubercles had been demonstrated a long time before.

From the foregoing, the author concludes that recovery is possible at any period of pulmonary consumption; that nature, in general, works the whole cure; and finally, that tubercular phthisis is not, like cancer, a disease of itself incurable; but that its extreme danger chiefly depends on the ordinary seat, extension, and relapses of the malady.

ROYAL INSTITUTION.

Friday, Jan. 20, 1843.

Dr. Faraday delivered the commencing lecture of the evening meetings at this institution on the 20th instant, when he chose for his subject the “induction of electricity.” He gave a brief and general description of electricity, its sources, influence, and general phenomena, which he illustrated with experiments, as he presumed there might be persons present who were unacquainted even with the first principles of the science. He then proceeded to the proper subject of the evening’s lecture, and stated as the definition of the word *induction*, that by it is indicated that power by which electricity is *induced* through the air. Induction causes the distribution of the electric fluid to the outer surface or outside of all conducting bodies. Dr. Faraday demonstrated this by electrifying a metallic globe suspended by silk, and then encasing it within two metallic hemispheres. By means of the electrometer, the power of which had been previously exhibited, it was found that the electric fluid had

* The frequency of tubercular disease in the inmates of the Parisian hospitals may also, we think, be explained by the wretched manner in which the poor inmates of these establishments had been previously nourished.—Eds.

* This seems to be an error. Probably 607 parts of carbonate and phosphate of lime.—Eds.

passed from the globe to the outside of the enclosing hemispheres, their interior being perfectly devoid thereof. This distribution of electricity to the outside of conducting bodies was further illustrated by placing within each other three metallic goblets or cells, each a size smaller than the other, and insulated from each other by a cake of shellac. On the application of the electric fluid to the inside of the innermost cell, it was found, as indicated by the electrometer, to pass instantaneously to the outer surface of the largest cell. The same result attended a somewhat similar experiment made with a piece of wire gauze, made into the shape of a vessel, like the wire gauze portion of the Davy lamp. The electric fluid in this instance also passed at once to the outside of the vessel. We may mention that Dr. Faraday stated in the theatre, that this last-named experiment he had noticed previously, but he had little doubt of the result.

Induction takes place through the air and through all other bodies, conductors as well as insulators. In metals, which have the power of conduction, care must be that they are not touched, so that their conducting power come not into play. Sulphur possesses very great power of induction.

Then comes the question, as to the state of our globe as regards electricity. Electrical phenomena have ever been looked upon as caused by the vicissitudes of the weather, the changes of temperature, &c.; but Dr. Faraday regards as the most important phenomenon of electricity, the growth of plants, by which they discharge the electric fluid from the atmosphere, and consequently act as lightning conductors. It is a far more important phenomenon than thunder-storms. Peltier advanced a startling theory with respect to the electrical condition of the globe. He thought the globe was in a highly negative state, and the surrounding atmosphere the reverse—that is, highly positive; in other words, he believed all matter to be negatively electrified, all space positively so. Without canvassing this theory, Dr. Faraday is inclined to believe that the sun, planets, &c., are in a state of electricity opposite to that of the earth, and are sustained thus by the power of induction. That the inhabitants of the earth cannot tell whether it is or is not in a highly electrified condition by walking on it, was shown by connecting a large metallic plate, with the electrical machine, and placing a white mouse on it. Although the plate was high electrified, as was demonstrated by repeated discharges, it had not any effect on the little animal, even when the discharge took place very near it.

With respect to thunder-storms:—The clear high air, which can be electrified, is a non-conductor; but if a cloud forms it conducts the electric fluid, as does moist air, from particle to particle, to the outer surface of the cloud in a general mass. A cloud consists of thousands of little particles or vesicles, all of them conductors of electricity. Dr. Faraday remarked that he could not clearly understand how a highly electrified cloud coheres, it being the first principle of electricity to repel particles similarly electrified. The particles of the cloud are most likely held together by the induction of the earth. Every particle which is electrified acts towards the external surface, even those which are in the interior of the cloud. In this way may be explained the intensity of a flash of lightning.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 10, 1843.

Dr. WILLIAMS, President.

Case of Obscure Disease in the Chest. By C. J. GRAHAM TICE, M.D., Assistant Surgeon 8th Reg. of Foot. [Communicated by Sir J. M'GRIGOR, Bart.]

The patient in this case was the quarter-master of the regiment, a man of plethoric and nervous temperament, aged forty-eight. On the 7th of September, 1842, he complained of pain in the left side, slightly affecting the respiration; pressure over the liver caused uneasiness; he had a disagreeable taste in the mouth like fried onions. He was treated with calomel and purgatives, and lost blood from the arm, but with only temporary relief. The dyspnoea increased in severity, and he had much cough, and the only easy position in which he could lie was leaning forward holding both knees. Percussion elicited no morbid sound, and auscultation proved that the lungs on both sides, as well as the heart, were healthy. Active treatment, consisting of venesection, calomel, antimony, &c., was pursued without relief. On the 8th of October he was salivated. Up to this time the cough had been dry, now there was abundant expectoration of glairy viscid mucus. Notwithstanding the severity of the symptoms, the pulse was little affected. At this time Dr. William Stokes saw the patient, and, after careful examination, pronounced the lungs and heart to be healthy. He considered the disease depending on nervous and spasmodic irritation of the respiratory organs, and advised expectorants and sedatives. Soon after this the breathing became stridulous and the cough laryngeal; there was a distressing sense of choking, and the same factor of the breath. No relief followed the treatment adopted—viz., leeches and extract of belladonna, externally; and calomel, tartar emetic, and sedatives, internally. The stridulous breathing was now replaced by mucous r  le and a total absence of vesicular breathing on the right side, and nearly so on the left. He died suddenly shortly after this, six weeks from the commencement of his illness.

Examination of the Body Thirty Hours after Death.

Both lungs were healthy, save being a little gorged with blood; on separating the right lung the knife entered a cavity the size of a pullet's egg, from which a most offensive odor was emitted. It was formed by an abscess in a mass of enlarged bronchial glands at the bifurcation of the trachea, and opening into the right bronchus. A loose calcareous mass was partially engaged in the lower part of the bronchus, almost wholly obstructing its canal. The mucous membrane of both bronchi, above the ulceration, was marked by a deep blush. A small ulcer was found towards the inner edge of the descending cornu of the thyroid cartilage on the right side. The remains of the suppurative glandular mass lay in the bifurcation of the trachea, pressing on the glandular surface of the oesophagus. The author remarks that the appearances on dissection satisfactorily explain the phenomena observed during life. The fetid taste in the mouth arose from the abscess opening into the bronchial tubes. The sense of suffocation, no doubt, was caused by the pressure of the large tumor on the trachea; and

the sudden extinction of life may be accounted for by the calcareous mass falling into the right bronchus, added to the partial obliteration of the left.

On the Decrement of Weight in Phthisis. By ROBERT WILLIAMS, M.D., Physician to St. Thomas's Hospital.

The author states, that some years ago he began a series of experiments on possible remedies in phthisis, satisfied that general treatment was of little avail, and that the cure of the disease must be sought for in a specific remedy. This series embraced preparations of platina, palladium, ormium, iridium, tilanium, chromium, and cerium. He subsequently tried every seed that Messrs. Charlwood, of Covent-garden, could furnish, and he had previously tried every wood, every bark, and every gum he could obtain. Nothing appeared beneficially to influence the disease; the result was, as usual, uniformly fatal, but the termination was not accelerated as to time, or aggravated in the preceding phenomena. The pathological appearances, also, in the cases examined after death, were the same as when the ordinary form of treatment was adopted; not the slightest attempt at reparation was seen in any part of the lungs. No injury, however, was done, except in two cases treated with white hellebore, in both of which death was so remarkably hastened that it seemed as if that substance, or probably the veratrine it is said to contain, acted as a poison in phthisis. In making these experiments the author determined on weighing the patients, considering that an increase or decrease of weight would afford a better criterion of amendment, or otherwise, than the fallacious hopes with which nature cheers the individual in this desolating disease.

The numbers weighed were few, perhaps eight, unexpected difficulties having occurred and the experiments being prematurely terminated in some cases by the patient leaving the hospital. One general law, however, was observed in all—viz., that the loss of weight was not continued, but intermittent; or, the patient being weighed weekly, and, as nearly as possible, under the same circumstances, showed an alternate increment and decrement generally of one or more pounds on each alternate week. The decrement, however, usually exceeded the increment, and consequently every few days an increasing balance was left against the patient. Several cases were related illustrative of the law, which the author states does not appear to have been mentioned by any writer; these, however, our limits will not allow us to give. The following are the concluding remarks of the author:—"The large number of substances I have tried as possible remedies for the cure of this fatal disorder has assured me that there is no class of substances which a prudent physician, beginning with small doses, and gradually increasing them, may not safely make use of in his attempts to cure this or any other equally intractable disorder; and as experiment is the only means by which medicine can be advanced, I strongly recommend the adoption of this practice, at least in public hospitals, as an imperative duty. The only inference which I am enabled to deduce from the singular law of the alternate increment and decrement of weight in phthisis, is that it may afford an explanation of the buoyant feelings of the patient, who must necessarily feel his symptoms ameliorated, and his

health improved every few days. It is evidently the measure of the last flickerings of the vital principle, but how the lamp of life is fed is, perhaps, beyond our power of explanation."

SHEFFIELD MEDICAL SOCIETY.

Jan. 13, 1843.

The PRESIDENT in the Chair.

Dr. Favell exhibited the following morbid specimens:—

I. *A Portion of Lung thickly studded with Tubercles, in a state of softening, and a small Cavity at the Apex.*—The patient had presented the usual general and physical signs of phthisis, but had died very suddenly. There was nothing in the chest or abdomen to account for the suddenness of his death. No cerebral symptoms were present, and the brain was not examined. The upper lobe of each lung presented a similar morbid appearance, except that the only cavity was at the apex of the left.

II. *Lamelliform Ossification of the Pleura.*—The patient was a young man who died of phthisis. On examining the chest there was manifest depression in the subclavicular portion on each side. It was motionless during the act of respiration, and yielded an extremely dull sound on percussion. The adhesion between the pleura on the right side was remarkably firm, but on the left it was found almost impossible to effect a separation. When the left lung was removed, the pleura covering it was observed to be in three different morbid states—part of it was considerably thickened, but not otherwise altered in character, part was cartilaginous, and a large mass covering the upper lobe was converted into perfect bone.

III. *An Enlarged Heart, on the surface of which were several irregular patches of partially organised lymph.*—The patient had not suffered from any affection of the pericardium, whilst he had been under Dr. Favell's care, but the Doctor exhibited the specimen as one which showed the pre-existence of partial pericarditis—a form of disease which all pathologists do not admit.

IV. *Nutmeg Liver—Hypertrophy of the White Substance.*—The patient was a young man, aged twenty-six, and had been employed as a butcher's laborer. He had led an irregular life, and been much addicted to drinking. The tissue of the liver was harder than natural, and there was slight effusion into the abdominal cavity. Tubercles existed in the lungs.

V. *A Portion of Lung containing a Scirrhus Tubercle about twice the size of a common hazel nut, taken from the body of a female who died of cancer uteri.*—During the latter period of her life she suffered considerably from pulmonary irritation.

VI. *A Scirrhus Uterus with its Appendages.*—The uterus was of about the normal size, but its texture extremely hard. The os uteri was entirely destroyed. The ovaries were greatly enlarged and indurated; the right contained a quantity of semi-gelatinous fluid. Neither the bladder nor rectum were involved in the disease, but a large scirrhus tubercle was formed upon the meso-rectum. The lining membrane of

the vagina was intensely injected. The specimen was obtained from the body of a female aged forty, who had been suffering from the disease for a period of three years. For nearly twelve months before death she had been subject to occasional attacks of severe hæmorrhage, as well as to a constant greenish foetid discharge. She had been married three times, but had never been impregnated. When first married, she was not quite sixteen years of age.

VII. *A Heart which weighed only three ounces and a half.*—The two ventricles were so small as only to be able to admit the little finger. The walls of the left ventricle were considerably thicker than natural. The aorta and pulmonary artery were, relatively to the size of the cavities of the heart, very large. The specimen was obtained from the body of a female, aged forty, who never suffered under any symptoms referable to organic lesion of the heart. She had no dyspnoea, no palpitation, no faintings, no difficulty in taking active exercise. She was a woman of middle size, but rather spare habit, and, when in health, had a good fresh color in her cheeks. In the discharge of all her household duties she was extremely active and industrious. Her weight, when in health, about the period of her third marriage, was very nearly ten stone.

Mr. Carr related the case of a female whom he had attended in labor the day before, aged about forty; had borne several children, but had not had one for ten years. She had been impressed with the notion that she should never recover from her confinement. Had a very natural labor; no continuance of violent pains for a great length of time; was delivered without any extreme hæmorrhage; in fact, without any unfavorable symptom, but in about three-quarters of an hour after delivery was seized with what her nurse called a fit, and in less than an hour she died. She had complained of some difficulty of breathing, but not to any great extent; a second fit came on a short time previous to death; there was no convulsion.

Mr. Boulbee then, after giving a cursory view of the legislative enactments respecting the crime of infanticide, and the questions to be solved in such cases by the medical witness, brought forward a case in which he had been called in as medical evidence. The case being one which will have to be brought forward at the Lent assizes at York, we refrain from entering into the particulars.

PATHOLOGICAL SOCIETY OF DUBLIN.

November 20.

TUBERCULAR DEPOSIT IN BONE.

Dr. Lees exhibited recent specimens of a scrofulous disease of the bones, in which there was infiltration of tubercular matter into the cancelli. The case was that of a child in the South Union Hospital (Dublin), who had been suddenly attacked with swelling of the forearm, accompanied by vomiting, crying, and the usual symptoms of hydrocephalus, which continued for a week, when death took place. A considerable quantity of fluid was found in the ventricles of the brain, and at its base a gelatinous effusion; the lungs were free from tubercles; one tubercle was found in the mediastinum and a great number in the mesentery; the urine, during the illness, had been albuminous, but the kidneys presented no appearance of

disease. The most remarkable appearances were those connected with the radius and ulna of the left forearm. The elbow joint itself was free, and the synovial membrane healthy, but the periosteum was much thickened. The medullary canal and cancelli, near the head of the ulna, were very vascular, and the upper end of the canal filled with caseous matter, which was also diffused in the cancellated structure.

SCARLATINA—PURULENT DEPOSITIONS IN THE JOINTS AND CELLULAR MEMBRANE.

Dr. Corrigan produced the recent parts in this case. The subject was a child, four years of age, who had been admitted into the Hardwicke Fever Hospital, on the 10th of November, which was the third day of her illness in scarlatina. The eruption was confined to the extremities, and was not high; the tonsils were swollen, but not ulcerated, and deglutition was very difficult; on the left side of the neck was an enlarged gland, which was tender and painful on pressure; it continued in apparently the same state for some days; on the morning of the 15th it appeared greatly enlarged, but no fluctuation could be perceived. The child was restless, and her skin burning hot; the fever continued to increase. On the 18th there were rigors; a patch of redness was observed on the back of her hand on the following morning; there was, also, a deep red blotch on the inside of the thigh and calf of the leg of one side, and on the great toe of the opposite side; no fluctuation could be felt in any of those situations; the fever had become typhoid, and the patient died on the following day. When the body was examined, the spot had disappeared from the back of the hand; underneath the skin there was a trace of purulent deposition. The dark red spots on the leg and toe still continued; they presented the same intensity of congestion through the whole depth of the subcutaneous cellular structure, and the cuticle (which Dr. C. exhibited) was permanently stained, but there was no trace whatever of purulent deposition. There was in the neck a considerable quantity of purulent matter among the cellular tissue and glands. The lungs and liver were perfectly free from any purulent deposition; but the knee-joints and the sterno-clavicular articulations were both filled with pus. The other joints were not examined.

Dr. Corrigan proceeded to make some observations on the different theories that have been advanced, in explanation of insulated purulent depositions. Arnott maintained that the pus is carried to distant parts from its original dépôt; Cruveilhier, that the particles of pus carried through the blood themselves become in distant parts distinct centres of irritation, round which congestion and purulent inflammation may occur. The present case would hardly bear out either of these opinions, and Dr. Corrigan thought it much more probable that these depositions in distant parts were wholly independent of each other, or only connected by sympathy of action in similar tissues. He considered that when a purulent secretion had taken place in any part of the system, the same lesion of secretion might, in an unhealthy state, occur in many and distant parts; and that he looked on the dark red patches, already described, as the preparatory local congestions, which, if the child had lived long enough, would all have terminated in purulent deposits.

RETROSPECT OF THE MEDICAL SCIENCES.

CHRONIC INFLAMMATION OF THE UTERINE APPENDAGES.

Dr. Doherty describes an inflammation of the appendages of the uterus, which is but feebly announced by symptoms from the very first, and occurs after the period during which the puerperal female is usually considered obnoxious to such attacks. It is stealthy in its nature, and usually makes its approaches so gradually that for a long time the existence of any local malady may be unknown to the patient herself, who thus permits it to remain untreated week after week, until it has, perhaps, laid the foundation of organic changes, which may prove ultimately irremovable.

The history of the case is generally as follows:—The patient has probably had an easy labor, and her progress been so favorable that medical supervision has ceased. She may have been convalescent for some days; or even weeks, but after exposure to cold, or from some local source of irritation, she is seized with shivering, succeeded by hot skin and quick pulse, and a dull weight about the pelvis. The feverishness disappears in a few hours, and although some uneasiness remains about the lower part of the abdomen, it is not sufficient to excite any apprehensions. Febrile paroxysms continue to recur at intervals, and are followed by pain and stiffness in moving the leg of the affected side. The pulse is now permanently accelerated, but soft, generally about 100 in the minute, and the tongue foul. The patient complains of frequent rigors, returning, perhaps, at the same time every day; she states that her health is declining, she is bathed with perspiration when rising in the morning, and she is unable to move one or both legs without pain or difficulty. There may be also a frequent desire to make water, and sometimes a tendency to diarrhoea. One, rarely both of the iliac fossæ, is found to be the seat of uneasiness, and on applying the hand, an unnatural fulness, sensitive to pressure, is perceived. The whole of the iliac region, particularly towards Poupart's ligament, is of a brawny hardness, with or without a prominent and more defined swelling, rather higher up, which, when it exists, is very tender to the touch.

This tumefaction may be premonitory of the formation of an abscess in the abdominal parietes, or it may be more deeply seated. In the latter case, by directing the patient to lean on her hands and knees, if the tumor be within the belly, not only the skin, but the whole thickness of muscular tissue can be freely moved over it, and will evidently appear unconnected with it. If the swelling be in the locality of the right iliac fossa, if it arise from accumulation of feces in the cæcum, the bowels will not have been satisfactorily emptied for some time past, colicky pains are experienced throughout the abdomen, attended probably with vomiting, and the whole belly is full and tender, though more particularly so in the right iliac fossa. The relief afforded by the expulsion of flatus, and by the action of a turpentine enema, will also assist in forming a diagnosis. If the swelling be caused by inflammation of the cellular tissue external to this intestine, the history of the case points to disturbance of the abdominal functions, and the consti-

tutional symptoms are more urgent, and are rather those of low fever than of hectic. If again the tumefaction be diagnostic of an abscess forming behind the iliac and psoas muscles, the patient will keep the limb flexed on the pelvis, and any attempt at extension, if the inflammation be at all active, will produce intense pain. The pain is often referred to the knee, and in the whole of the symptoms it in many cases closely resembles disease of the hip-joint. In the uterine inflammation described by Dr. Doherty, there is equal tension and hardness, and the patient lies with her leg drawn up, but she is comparatively indifferent to her position, and can extend the limb when requested so to do.

The evidence obtained by a vaginal and rectal examination is still more conclusive. On introducing a finger into the vagina, the hardness, so remarkable in the iliac fossa, will be found to have extended to the roof of the vagina, which is tender to the touch, and as firm and inelastic as a deal board. Not the slightest impression can be made on it by pressure. The uterus is also bound down to the affected side, either throughout its whole extent, by which it suffers a lateral displacement, or only partially, so that the fundus is drawn in one direction, while the os tincæ is turned in the opposite. The evidence thus far shows that the ligamentous attachments of the womb have become infiltrated and thickened. If the disease has existed for any length of time, the ovary will probably be implicated, in which case the symptoms will be more acute and the pain more severe, and there will be a prominent and defined tumor, continuous with and above the deep-seated thickening, which, along Poupart's ligament, is gradually lost in the surrounding parts. The instituting an examination of the rectum will materially aid the medical attendant in forming a diagnosis in this case, and it is absolutely necessary to enable him to form a correct estimate of the extent of the disease. In this way the tumor may be grasped between the finger in the rectum and the hand externally, and its situation thus correctly determined. The occasional pains which shoot down in the course of the nerves of the leg of the affected side may increase into a general neuralgic tenderness of the whole limb, with tumefaction of the upper part, and ultimately with all the symptoms of phlegmasia dolens.

This peculiar inflammation of the uterine appendages may be the result of an imperfectly cured acute attack, announced by urgent symptoms occurring within a short period after labor, or it may make an obscure approach in patients convalescent from abortion or parturition at the full term, several days, or even weeks, subsequently. Dr. Doherty has seen it commence as late as the eighth week after delivery, but the general period is about the twelfth or fourteenth day.

The treatment recommended consists of local depletion, counter-irritation, and the use of mild mercurials. If the pain be severe, or the roof of the vagina exceedingly hard and tender, great benefit will be derived from the free application of leeches internally, by means of the speculum, and from the

use of cupping-glasses externally. A succession of blisters may be applied over the iliac region, and when the mouth has been affected by the mercurial, the hydriodate of potash may be administered, and an ointment made with it, or with the ioduret of lead applied over the region of the tumor. The mercurial should be combined with hyoscyamus, to allay the irritability that mostly prevails. Under this management the tumefaction subsides, and the pliancy of the vaginal roof returns. According as this restoration is accomplished, the uterus may be perceived to rise, until it gradually resumes its natural position, and thus all the structures, as far, at least, as can be ascertained during life, will have regained their normal condition. If the limb be affected with phlegmasia dolens, the treatment requisite for that complication must be combined with that employed for the removal of the uterine inflammation.

When the progress of the disease is uncontrolled, changes are wrought in the organs affected, or in the adjacent structures, which give rise to symptoms of an immediately alarming nature, or lay the foundation for future mischief. Thus abscesses may form in the broad ligaments or ovaries, and their contents escape either into the cavity of the abdomen, through the vaginal walls, or through the abdominal parietes near Poupert's ligament; or the irritation may extend to the serous covering of the intestines, and establish a general peritonitis. These consequences, however, are more likely to follow the acute form of the disease. The Fallopian tube may be rendered impervious, or its fimbriated extremity glued to an adjacent structure, causing sterility of the generative organs of that side, or if the calibre of the tube be only diminished, an ovum may, at a subsequent time, be arrested in its passage, and extra-uterine pregnancy produced. The ovary may remain chronically enlarged, and be subject to various displacements, or take on a still more morbid process, and become the seat of malignant disease; and lastly, from the false position of the uterus, future impregnation may be prevented, or else the womb, being firmly bound down and unable to expand, casts off the ovum prematurely, and thus a succession of abortions or miscarriages may ensue.—*Dublin Medical Journal*, Nov., 1842.

PURIFICATION OF STORAX.

In consequence of the difficulty of procuring pure balsam of copaiba, and of its disgusting taste, purified storax has been again tried in France, according to the plan recommended by M. L'Heretier some years since. Storax being also much subject to adulterations, M. Lepage, a pharmacien at Gisors, recommends the following process for its purification. His communication is published in the "*Journal de Chimie Médicale*."

Liquid storax is insoluble in cold, but soluble in boiling, alcohol. By introducing the storax into a retort with from two to two and a half parts of alcohol at 34°, and heating the mixture in the sand bath until it boils, a turbid solution will be obtained, which, filtered rapidly, will deposit, on cooling, a greenish fluid resin, almost transparent, and of a very powerful odor. If the operation be carried on speedily, and the liquid be divided so as to be filtered through different apparatus at the same time, the only residuum on the filter will be impurities without any

resin; but if any turbid solution remain, it may be heated again with a little alcohol, and filtered while boiling. When the resin has been entirely separated, which requires about twelve hours, the alcohol may be recovered by distillation, and the storax must be heated in a sand bath, to drive off the alcohol which may be combined with it. Thus purified, storax presents itself in the form of a greenish semi-transparent resin, of an agreeable odor, and the consistence of turpentine; it is soluble in æther in almost any proportion; alcohol at 40° dissolves it readily, but it is little soluble in alcohol at 33°; its alcoholic solution reddens test paper. It must be preserved in well stoppered bottles, kept full as much as possible, without which a superficial crystalline layer forms on the surface, the thickness of which augments gradually.

M. Lepage recommends a compound of one part of calcined magnesia and eight of purified storax, kept in a sand bath for half an hour, and then allowed to cool, the operator stirring it continually, for the administration of the balsam in the form of pills. The mass becomes hard in the course of time, but soon becomes softened again in a sand bath. By substituting two parts of the dry hydrated peroxide of iron for half the magnesia, a preparation will be obtained that may serve as a substitute for the copahivate of iron of M. Mège. The syrup of storax is prepared by dissolving twenty scruples of the purified balsam in fifty of boiling alcohol, pouring the boiling filtered solution on 600 scruples of coarsely powdered sugar, drying them on a stove, powdering, and dissolving in a receiver at sand bath heat, in 300 scruples of water; then adding thirty scruples of pulverised gum arabic, previously dissolved in fifty scruples of water, and shaking the receiver from time to time, to facilitate the solution of the sugar, and when it is completely effected, passing the syrup through a piece of muslin.

Thus prepared, this syrup is as opaque as orgeat; it has an agreeable odor and taste; a part of the resin separates in the course of time, but by shaking it mixes with it again. Thirty scruples of syrup contain about twelve grains of purified storax. The addition of the gum renders the separation of the resin a slower process.

It may be administered in the form of draught, by rubbing it down with the yolk of an egg. It may be given in lavement, mixed in the same manner.

BLUE URINE.

M. Bouchardat has published an account of the analysis of blue urine in the "*Journal des Connaissances Méd. Pratiques*." It was passed by a patient of Priessnitz, who, after having resided twenty-seven years in Surinam, where he was twice affected with obstinate intermittents, returned to Europe with considerable enlargement of the liver and spleen. Not deriving any benefit from medical treatment, he went to Graeffenberg, and placed himself under the hands of Priessnitz. He remained there nine months, at the lapse of which time he discovered that his urine had changed color; it became at first very dark colored, then quite blue, after which it changed to green, and then became blackish. This phenomenon is reported to have continued a fortnight, and then the patient was cured.

The urine which was sent to M. Bouchardat had a

strong ammoniacal odor, a salt taste, and an intensely blue color; it deposited a sediment of a beautiful blue color. Examined with the microscope, the sediment appeared to be formed of globules of exceeding tenuity, and of regular ovoid form, and, as regards dimension, about one-third the size of the globules of human blood.

The urine restored the blue color of test paper previously reddened by an acid. Reagents indicated the presence of the phosphates, sulphates, and chlorurets of lime, magnesia, and ammonia. The blue coloring matter was partially soluble in æther, which was colored by it; the ætherial solution being evaporated, there was left a slight residuum of a fixed oil, having a repulsive odor. Boiling alcohol partially dissolved the coloring matter, and left a residue of a deeper color. Nitric acid destroyed the coloring matter, and furnished a straw-colored liquid. Diluted sulphuric acid did not effect any change. A solution of oxalic acid dissolved it, and a blue liquid was obtained, which became very limpid on filtration. Ammonia did not effect any change. Potash disengaged the coloring matter from the ammonia destroyed by boiling.

M. Bouchardat concludes that this urine contained the saline principles of ordinary urine, its coloring matter being quite special, the microscopic examination, as well as the action of the re-agents, causing it to be considered as a peculiar organic substance.

Bouchardat, about twelve years ago, observed a blue coloring matter resulting from the spontaneous alteration of gluten preserved in dry air, which closely resembled the sediment of this urine, and behaved in the same manner with the re-agents.

STYRACINE.

A crystallisable matter was discovered by M. Bonastre in storax, to which he gave the name of styracine. The following process is advised by M. Lepage in the "*Journal de Chimie Médicale*," in order to obtain it with facility:—The storax of commerce should be treated with cold hydric æther, which is to be poured off after several days' contact, and the filtered liquid set aside for spontaneous evaporation. The dried residuum is then acted on by boiling alcohol at 40°, and the filtered liquid also set aside for spontaneous evaporation; when about three-fourths have been evaporated, the remainder is poured off, the crystals adhering to the sides of the capsule are washed with a little cold alcohol, and dried in joseph paper. The styracine may be obtained properly crystallised, and sufficiently pure, by being dissolved again once or twice in boiling alcohol at 40°.

It may also be obtained by treating the storax several times with alcohol of commerce, allowing part of the liquid to evaporate each time spontaneously, and pressing the matter left between leaves of filtering paper, &c. But greater difficulty is always experienced by this process in getting rid of a green coloring matter, which always stains the crystals.

Styracine presents itself in the form of small needles, almost always agglomerated, of a very white color, without any sensible savor, and of a light, agreeable, balsamic odor. It is completely insoluble in cold and boiling water; it floats on the latter in the form of oily drops, which have a greater degree of consistence on the cooling of the liquid. Alcohol at 33° dissolves very little, but it is more soluble in alcohol

at 40°, and still more so in æther. Its alcoholic solution does not redden litmus paper; the addition of water renders it milky. Concentrated ammonia has not any action on it, nor is it soluble even in strong solutions of potass or soda. Cold sulphuric acid carbonises it; the reaction is still greater if heat be applied. Hydrochloric acid has no influence neither when cold nor hot. Nitric acid transforms it into a very friable yellow matter, without any sensible taste, and a very marked odor of bitter almonds is generated, from which it is probable that styracine contains some cinnamyle.

M. Lepage gives the following as the result of the analysis of purified storax:—A neutral crystallisable resin (styracine), a soft incrustable resin, a green coloring matter, benzoic acid, and perhaps cinnamic acid.

ABSORPTION OF IODINE.

Stimulated by the example of Orfila, who has published a series of experiments on the absorption of iodine, M. Léon Brousse has tested the urine of several patients who had been treated for hydrocele by the iodine injection. In every instance he was readily enabled to discover the metalloid in the urinary secretion by the third or fourth day after the operation, and in one instance, at least, as early as the second day. In this case, that of a Spaniard, forty years of age, the scrotum continuing swollen, and evidently containing fluid five weeks after the operation, it was punctured with a lancet, and a sanguinolent fluid evacuated, which, on being subjected to the usual tests, yielded evident indications of the presence of iodine.—*Journal de Chimie Médicale*, Dec., 1842.

CINCHOVATINE.

M. Manzini obtains a new alcaloid from the cinchona ovata, which he calls cinchovatine, by the process adopted for the preparation of quina. Cinchovatine is found in very long prismatic crystals of a beautiful white color; it is inodorous, and possesses a bitter taste, which is slowly developed. It is scarcely soluble in water, but very readily so in hot alcohol and ether. The salts which it forms with acids are soluble and crystallisable; their solution is precipitated by tannic acid, the ioduret of potassium, the bichloruret of platina, the deuto-chloruret of gold, and some metallic chlorurets. Heated to 400°, it melts into a brownish liquid, which solidifies like a resin on cooling. The formula of its composition is expressed by $C_{48}H_{54}A_{24}O_8$, or carbon 69.80; hydrogen, 6.83; nitrogen, 7.16; oxygen, 16.21.—*Ibid*

POOR-LAW REGULATIONS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—As the time approaches when the new regulations of the poor-law commissioners are to come into operation, I have no doubt that all other medical officers, like myself, are anxious as to the advantages which they will gain from them; for my part I only see that they will lose much more in emoluments (which after all is the main spring of action), for the guardians will make calculations far below what is correct. As for instance, I receive a salary,

say £100 per annum, which includes every operation, and this, in the next election, will be cut down to £80, the remaining £20 being deducted to be made up by the accidents, operations; and the accidents of the district to which I belong would only amount to £5 10s. Perhaps you will inform us through your Journal if there is to be no fixed rate per head allowed by the commissioners, from which the guardians cannot deviate. If we are only to lose by our exertions in endeavouring to benefit, we had better let matters rest as they were, for it is positive enough such will be the result of this last regulation. I would suggest that an application be made at once to the commissioners before the advertisements are put forth for medical officers, requesting them to state to the different boards of guardians that the officers were to be allowed so much per head on the whole population,* which is much fairer for the surgeon and better for the poor than paying per case. Trusting that you will immediately draw the attention of the committee to the above,

I am, Sir,

Your obedient servant,
A MEDICAL OFFICER.

FOREIGN PHYSICIANS IN PARIS.

The number of foreign physicians now authorised to practice in Paris amounts to thirty-one. Within the last ten years only two or three permissions have been granted, in spite of the numerous demands addressed to the Minister of Public Instruction.

ROYAL ACADEMY OF MEDICINE, PARIS.

The following gentlemen have been appointed honorary members of the Royal Academy of Medicine:—Sir James Clark, Dr. Abercrombie, Dr. Bright, Dr. Hall, Mr. Samuel Cooper, Mr. Guthrie, Mr. Lawrence, and Mr. Travers.

MORTALITY OF THE PLAGUE.

Of 97 patients treated in the lazaretto at Alexandria in 1842, 62 were cured, and 35 died. Of the latter, 14 died immediately after the first visit, and 1 during convalescence, from another disease. Of 166 patients treated at their own homes, 151 died, and 15 only recovered.—*Il Filocomo* (Malta Journal), No. 14.

DISPENSARY ELECTIONS.

It has been decided by the Court of Queen's Bench, Ireland, that a married woman, being herself a subscriber to the charity, has a right to vote at elections; and, likewise, that votes by proxy, when such mode of voting is sanctioned by the bye-laws, are valid.

* This is not, of course, to include payment for operations, midwifery, &c.

UNIVERSITY COLLEGE HOSPITAL.

The medical officers of this institution contribute something over £3,000 per annum towards its support; the public about £550.

OBITUARIES.

At Southampton, on the 15th instant, at an advanced age, Dr. Robert Wightman.

We have to announce, with regret, the death, at Vienna, of Joseph Frank, son of the illustrious John Peter Frank, and author of the best treatise hitherto published on the practice of medicine.

On the 19th of October last, on his passage from Madras to the Cape of Good Hope, J. Flocton, of the Madras Medical Department.

PROMOTIONS AND APPOINTMENTS.

ST. GEORGE'S HOSPITAL.

Mr. Edward Cutler has succeeded to the office of surgeon, vacant by the death of Mr. Walker; and Mr. Henry James Johnson has been appointed assistant-surgeon, vice Mr. Cutler, promoted.

MILITARY.

57th Foot—Staff-surgeon of second class, R. H. A. Hunter, to be surgeon, vice A. B. Morgan, who retires on half pay.

78th—Assistant-surgeon John Mitchell, M.D., from the Staff, to be assistant-surgeon, vice Archer, promoted.

Hospital Staff—Surgeon James Moffit, M.D., from the 12th Light Dragoons, to be staff-surgeon of the first class, vice Hackett, promoted.

Assistant-surgeon George Arthur, M.D., from the 78th, to be staff-surgeon of the second class, vice Hunter.

William Walter Weld, gent., to be assistant-surgeon to the Forces.

ERRATA.

In the last Number, page 327, col. 2, for "F. A. Clewe," read *F. A. Cleeve*. In Mr. Banner's paper, page 327, col. 1, line 18, for "one and a half of opium," read *half a grain of opium*. Page 331, col. 2, line 50, for "practique," read *pratique*. Page 334, col. 1, line 36, for "spinal," read *spiral*.

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ON THE PREPARATIONS OF THE

INDIAN HEMP, OR GUNJAH,* (*Cannabis Indica*)

Their Effects on the Animal System in Health, and their Utility in the Treatment of Tetanus and other Convulsive Diseases.

By W. B. O'SHAUGHNESSY, M.D., Bengal Army,
Late Professor of Chemistry and Materia Medica in the
Medical College of Calcutta.

[Concluded from p. 347.]

Experiments by the Author—Inferences as to the Action of the Drug on Animals and Man.

Such was the amount of preliminary information before me, by which I was guided in my subsequent attempts to gain more accurate knowledge of the action, powers, and possible medicinal applications of this extraordinary agent.

There was sufficient to show that hemp possesses, in small doses, an extraordinary power of stimulating the digestive organs, exciting the cerebral system, of acting also on the generative apparatus. Larger doses, again, were shown by the historical statements to induce insensibility or to act as a powerful sedative. The influence of the drug in allaying pain was equally manifest in all the memoirs referred to. As to the evil sequelæ so unanimously dwelt on by all writers, these did not appear to me so numerous, so immediate, or so formidable, as many which may be clearly traced to over-indulgence in other powerful stimulants or narcotics—viz, alcohol, opium, or tobacco.

The dose in which the hemp preparations might be administered, constituted, of course, one of the first objects of inquiry. Ibn Beitar had mentioned a *direm*, or forty-eight grains of *churrus*; but this dose seemed to me so enormous, that I deemed it expedient to proceed with much smaller quantities. How fortunate was this caution, the sequel will sufficiently denote.

An extensive series of experiments on animals was in the first place undertaken, among which the following may be cited:—

Expt. 1.—Ten grains of Nipalese *churrus*, dissolved in spirit were given to a middling sized dog. In half an hour he became stupid and sleepy, dozing at intervals, starting up, wagging his tail as if extremely contented, he ate some food greedily, on being called to he staggered to and fro, and his face assumed a look of utter and helpless drunkenness. These symptoms lasted about two hours, and then gradually passed away; in six hours he was perfectly well and lively.

Expt. 2.—One drachm of *majoon* was given to a small sized dog; he ate it with great delight, and in

twenty minutes was ridiculously drunk; in four hours his symptoms passed away, also without harm.

Expts. 3, 4, and 5.—Three kids had ten grains each of the alcoholic extract of *gunjah*. In one no effect was produced; in the second there was much heaviness, and some inability to move; in the third a marked alteration of countenance was conspicuous, but no further effect.

Expt. 6.—Twenty grains were given, dissolved in a little spirit, to a dog of very small size. In a quarter of an hour he was intoxicated; in half an hour he had great difficulty of movement; in an hour he had lost all power over the hinder extremities, which were rather stiff but flexible; sensibility did not seem to be impaired, and the circulation was natural. He readily acknowledged calls by an attempt to rise up, In four hours he was quite well.

In none of these or several other experiments was there the least indication of pain, or any degree of convulsive movement observed.

It seems needless to dwell on the details of each experiment; suffice it to say that they led to one remarkable result—that while carnivorous animals and fish, dogs, cats, swine, vultures, crows, and adjutants, invariably exhibited the intoxicating influence of the drug, the graminivorous, such as the horse, deer, monkey, goat, sheep, and cow, experienced but trivial effects from any dose we administered.

Encouraged by these results, no hesitation could be felt as to the perfect safety of giving the resin of hemp an extensive trial in the cases in which its apparent powers promised the greatest degree of utility.

Cases of Rheumatism treated by Hemp. Catalepsy produced by one grain.

The first cases selected were two of acute rheumatism and one of that disease in the chronic form, occurring among the patients in the Clinical Hospital of the Medical College. In the two former but little relief had been derived from a fair trial of antiphlogistic measures, and of Dover's powder with antimonials; in the last case, sarsaparilla at first, and subsequently the Hemidesmus Indicus with warm baths had been tried without advantage.

On the 6th November, 1838, one grain of the resin of hemp was administered in solution, at two, p.m., to each of these three patients.

At four, p.m., it was reported that one was becoming very talkative, was singing songs, calling loudly for an extra supply of food, and declaring himself in perfect health. The other two patients remained unaffected.

At six, p.m., I received a report to the same effect, but stating that the first patient was now falling asleep.

At eight, p.m., I was alarmed by an emergent note from Nobinchunder Mitter, the clinical clerk on duty, desiring my immediate attendance at the hospital, as the patient's symptoms were very peculiar and formi-

* Published in the Transactions of the Medical Society at Calcutta for 1839, and now revised by the Author for the Provincial Medical Journal.

dable. I went to the hospital without delay, and found him lying on his cot quite insensible, but breathing with perfect regularity, his pulse and skin natural, and the pupils freely contractile on the approach of light.

Alarmed and pained beyond description at such a state of things, I hurried to the other patients—found one asleep, the third awake, intelligent, and free from any symptoms of intoxication or alarm.

Returning then to the first, an emetic was directed to be prepared, and while waiting for it I chanced to lift up the patient's arm. The professional reader will judge of my astonishment, when I found that it remained in the posture in which I placed it. It required but a very brief examination of the limbs to find that the patient had by the influence of this narcotic been thrown into that strange and most extraordinary of all nervous conditions, into that state which so few have seen, and the existence of which so many still discredit—the genuine *catalepsy* of the nosologist.

It had been my good fortune years before to have witnessed two unequivocal cases of this disorder. One occurred in the female clinical ward in Edinburgh, under Dr. Duncan's treatment, and was reported by myself for the "*Lancet*," in 1828. The second took place in 1831, in a family with whom I resided in London. This case was witnessed by Dr. Silver, Mr. G. Mills, and several other professional friends. In both these cases the cataleptic state was established in full perfection, and in both the paroxysm terminated suddenly without any evil consequence.

To return to our patient; we raised him to a sitting posture, and placed his arms and limbs in every imaginable attitude. A waxen figure could not be more pliant or more stationary in each position, no matter how contrary to the natural influence of gravity on the part.

To all impressions he was meanwhile almost insensible; he made no sign of understanding questions; could not be aroused. A sinapism to the epigastrium caused no sign of pain. The pharynx and its coadjutor muscles acted freely in the deglutition of the stimulant remedies which I thought it advisable to administer, although the manifest cataleptic state had freed me altogether of the anxiety under which I before labored.

The second patient had meanwhile been roused by the noise in the ward, and seemed vastly amused at the strange aspect and the statue-like attitudes in which the first patient had been placed, when on a sudden he uttered a loud peal of laughter, and exclaimed that four spirits were springing with his bed into the air. In vain we attempted to pacify him; his laughter became momentarily more and more uncontrollable. We now observed that the limbs were rather rigid, and in a few minutes more his arms or legs could be bent, and would remain in any desired position. A strong stimulant drink was immediately given, and a sinapism applied. Of the latter he made no complaint, but his intoxication led him to such noisy exclamations that we had to remove him to a separate room; here he soon became tranquil, his limbs in less than an hour gained their natural condition, and in two hours he represented himself to be perfectly well and excessively hungry.

The first patient continued cataleptic till one, a.m., when consciousness and voluntary motion quickly returned, and by two, a.m., he was exactly in the same state as the second patient.

The third man experienced no effect whatever, and on further inquiry it was found that he was habituated to the use of *gunjah* in the pipe.

On the following day it gave me much pleasure to find that both the individuals above mentioned were not only uninjured by the narcotic, but much relieved of their rheumatism; they were discharged quite cured in three days after.

The fourth case of trial was an old muscular cooley, a rheumatic malingerer, and to him half a grain of hemp resin was given in a little spirit. The first day's report will suffice for all:—In two hours the old gentleman became talkative and musical, told several stories, and sang songs to a circle of highly delighted auditors, ate the dinners of two persons subscribed for him in the ward, sought also for other luxuries we can scarcely venture to allude to—and finally fell soundly asleep, and so continued till the following morning. On the noon-day visit, he expressed himself free from headache or any other unpleasant sequel, and begged hard for a repetition of the medicine, in which he was indulged for a few days and then discharged.

In several cases of acute and chronic rheumatism admitted about this time, half-grain doses of the resin were given, with closely analogous effects; alleviation of pain in most, remarkable increase of appetite in all, unequivocal aphrodisia, and great mental cheerfulness. In no one case did these effects proceed to delirium, or was there any tendency to quarrelling. The disposition developed was uniform in all, and in none was headache or sickness of stomach a sequel of the excitement.

Case of Hydrophobia.

A case now occurred in which the influence of a narcotic, capable either of cheering or of inducing harmless insensibility, would be fraught with blessings to the wretched patient.

On the 22nd November, at eight, a.m., a note in English was handed to me by my servant, entreating my assistance for the Hakim Abdullah, then at my gate, who had been bitten by a rabid dog three weeks before, and who feared that the miserable consequences of the bite already had commenced. I found the poor man in a carriage; he was perfectly composed, though quite convinced of the desperate nature of his case. He told me that the evening before, on passing near a tank, he started in alarm, and since then was unable to swallow liquid. His eye was restless, suspicious, and wild; his features anxious; his pulse 125; his skin bedewed with cold moisture; he stated nevertheless that he wished for food and felt well. A small red and painful cicatrix existed on the left forearm.

He was immediately removed to the hospital, where I accompanied him. By his own desire water was brought in a metallic vessel, which he grasped, and brought near his lips; never can I forget the indescribable horrors of the paroxysm which ensued. It abated in about three minutes, and morbid thirst still goading the unhappy man, he besought his servant to apply a moistened cloth to his lips. Intelligent and brave, he determinately awaited the contact of the

cloth, and for a few seconds, though in appalling agony, permitted some drops to trickle on his tongue; but then ensued a second struggle, which, with a due share of the callousness of my profession, I could not stand by to contemplate.

Two grains of hemp resin in a soft pillular mass were ordered every hour; after the third dose, he stated that he felt commencing intoxication; he now chatted cheerfully on his case, and displayed great intelligence and experience in the treatment of the very disease with which he was visited. He talked calmly of drinking, but said it was in vain to try—but he could suck an orange; this was brought to him, and he succeeded in swallowing the juice without any difficulty.

The hemp was continued till the sixth dose, when he fell asleep and had some hours rest. Early the ensuing morning, however, Mr. Siddons, my assistant, was called up to him, and found him in a state of tumultuous agony and excitement; tortured by thirst he attempted to drink; but I will spare the reader the details of the horrors which ensued.

The hemp was again repeated; and again, by the third dose, the cheering alleviation of the previous day was witnessed. He ate a piece of sugar-cane and again swallowed the juice; he partook freely of some moistened rice, and permitted a purgative enema to be administered; his pulse was nearly natural; the skin natural in every respect; his countenance was happy. On one subject only was he incoherent, and even here was manifested the powerful and peculiar influence of the narcotic. He spoke in raptures of the ladies of his *zenana*, and his anxiety to be with them. We ascertained, however, that he had no such establishment.

Four days thus passed away, the doses of hemp being continued. When he fell asleep, on waking the paroxysms returned, but were again almost immediately assuaged as at first. Meanwhile, purgative enemata were employed, and he partook freely of solid food, and once drank water without the least suffering. But about three, p.m., of the fifth day he sunk into a profound stupor, the breathing slightly stertorous; in this state he continued, and without further struggle death terminated his sufferings at four, a.m., on the 27th of November.

Reviewing the preceding summary of this interesting case, it seems evident that at least one advantage was gained from the use of the remedy—the awful malady was stripped of its horrors; if not less fatal than before, it was reduced to less than the scale of suffering which precedes death from most ordinary diseases. It must be remembered, too, that in this, the first case ever so treated, I possessed no data to guide me as to the dose or manner of administration of the drug. The remarkable cases of tetanus detailed in the sequel throw light on these important points, and will lead, in future cases, to the unhesitating administration of much larger quantities than at first I ventured to employ. I am not, however, rash enough to indulge the hope which involuntarily forces itself upon me, that we will ever from this narcotic derive an effectual remedy for even a solitary case of this disease; but next to cure, the physician will perhaps esteem the means which enable him “to strew the path to the tomb with flowers,” and to di-

vest of its *specific* terrors the most dreadful malady to which mankind is exposed.

While the preceding case was under treatment, and exciting the utmost interest in the school, several pupils commenced experiments on themselves to ascertain the effects of the drug. In all, the state of the pulse was noted before taking a dose, and subsequently the effects were observed by two pupils of much intelligence. The result of several trials was, that in as small doses as a quarter of a grain the pulse was increased in fulness and frequency; the surface of the body glowed; the appetite became extraordinary; vivid ideas crowded the mind; unusual loquacity occurred; and, with scarcely any exception, great aphrodisia was experienced.

In one pupil, Dinonath Dhur, a retiring lad of excellent habits, ten drops of the tincture, equal to a quarter of a grain of the resin, induced in twenty minutes the most amusing effects I ever witnessed. A shout of laughter ushered in the symptoms, and a transitory state of cataleptic rigidity occurred for two or three minutes. Summoned to witness the effects, we found him enacting the part of a Rajah giving orders to his courtiers; he could recognise none of his fellow students or acquaintances; all to his mind seemed as altered as his own condition; he spoke of many years having passed since his student's days; described his teachers and friends with a piquancy which a dramatist would envy; detailed the adventures of an imaginary series of years, his travels, his attainment of wealth and power; he entered on discussions on religious, scientific, and political topics, with astonishing eloquence, and disclosed an extent of knowledge, reading, and a ready apposite wit, which those who knew him best were altogether unprepared for. For three hours and upwards he maintained the character he at first assumed, and with a degree of ease and dignity perfectly becoming his high situation. A scene more interesting it would be difficult to imagine. It terminated nearly as suddenly as it commenced, and no headache, sickness, or other unpleasant symptom followed the innocent excess.

In the symptoms above described we are unavoidably led to trace a close resemblance to the effects produced by the reputed inspiration of the Delphic oracles; perhaps it would not be very erroneous to conclude that it was referable to the same kind of excitement.

Use in Cholera.

An epidemic cholera prevailing at this period, two of the students administered the tincture of hemp in several cases of that disease, and cures were daily reported by its alleged efficacy. Dr. Goodeve was thus led to try it in several cases, and his report was in the highest degree favorable. The diarrhoea was in every instance checked, and the stimulating effects of the drug clearly manifested. The durwan of the college, an athletic Rajpoot, was attacked, and came under my treatment after he had been ill seven hours; he was pulseless, cold, and in a state of imminent danger, the characteristic evacuations streaming from him without effort. Half a grain of the hemp resin was given, and in twenty minutes the pulse returned, the skin became warm, the purging ceased, and he fell asleep. In an hour he was cataleptic, and con-

tinued so for several hours. In the morning he was perfectly well and at his duty as usual.

It is but fair to state, however, that the character of the epidemic was not at the time malignant. I admit the cases to be inconclusive, but I conceive them to be promising, and that they deserve the due attention of the practitioner.

Since this passage was written in 1838, the tincture of hemp has been used in a great number of cases, both European and native, in the hospital of the Medical College. I know no remedy equal to it as a general and steady stimulant when given to *Euro-peans* in half drachm doses during the tractable stage of this disease. I have known the pulse and heat return and the purging checked by a single dose. It allays vomiting much more certainly than the opium preparations, and is not more likely than these to lead to cerebral congestion on the cessation of cholera symptoms. The cheering effect on the patient's spirits is not the least benefit this remedy confers.

In *native* cases much less advantage was obtained; nearly all this class of patients were old gunjah smokers.

Use in Tetanus.

I now proceed to notice a class of most important cases, in which the results obtained are of the character which warrants me in regarding the powers of the remedy as satisfactorily and incontrovertibly established. I allude to its use in the treatment of traumatic *tetanus*, or lock-jaw, next to hydrophobia, perhaps the most intractable and agonising of the whole catalogue of human maladies.

The first case of this disease treated by hemp was that of Ramjan Khan, aged thirty, admitted to the College Hospital, on the 13th of December, 1838, for a sloughing ulcer on the back of the left hand. Five days previously a native empiric had applied a red hot *gool* (the mixture of charcoal and tobacco used in the hookah) to the back of the left wrist, as a remedy for chronic dysentery and spleen. The patient's brother was similarly cauterised on the same day. In both sloughing took place down to the tendons. Symptoms of tetanus occurred on the 24th of December. The brother, who had refused to avail himself of European aid, had been seized with tetanus at his own home four days previously, and died after three days' illness. On the 26th December spasms set in, and recurred at intervals of a few minutes; the muscles of the abdomen, neck, and jaws became firmly and permanently contracted. Large doses of opium with calomel having been administered for some hours, without the least alleviation of symptoms, and his case having on consultation been pronounced completely hopeless, I obtained Mr. Egerton's permission to subject the poor man to the trial of the hemp resin. Two grains were first given at half past two, p.m., dissolved in a little spirit. In half an hour the patient felt giddy; at five, p.m., his eyes were closed, he felt sleepy, and expressed himself much intoxicated.

He slept at intervals during the night, but on waking had convulsive attacks.

On the 27th, two grains were given every third hour (a purgative enema was also administered, which operated three times); the stiffness of the muscles became much less towards evening, but the spasms

returned at intervals as before; pulse and skin natural.

28. Improved; is lethargic but intelligent; spasms occasionally occur, but at much longer intervals, and in less severity.

29. Dose of hemp increased to three grains every second hour. Symptoms moderating.

30. Much intoxicated; continues to improve.

January 1, 1839. A hemp cataplasm applied to the ulcer, and internal use of remedy continued. Towards evening was much improved; spasms trivial; no permanent rigidity; had passed two *dysenteric stools*.

2. Morning report: Had passed a good night, and seems much better. Evening report: Doing remarkably well.

3, 4, and 5. Continues to improve. Hemp resin in two grain doses every fifth hour.

6. Five, p.m.—Feverish; skin hot; pulse quick; all tetanic symptoms gone; passing mucous and bloody stools. Leeches to abdomen; a starch and opium enema with three grains of acetate of lead every second hour; tepid sponging to the body; hemp omitted.

7. Six, a.m.—Still feverish; stools frequent, mucous; abdomen tender on pressure; no appetite; the ulcer sloughy, ragged, and offensive. Opium and acetate of lead continued; abdomen leeches; sore dressed with water. At noon there was slight rigidity of abdominal muscles. Hemp resumed. At three, p.m., became intoxicated and hungry; ulcer extremely dry, foul, and abominably fetid; towards evening rigidity ceased. Hemp discontinued.

From this day the tetanus may be considered to have ceased altogether, but the dysenteric symptoms continued, despite of the use of opium and acetate of lead; the ulcer, too, proved utterly intractable. Some improvement in the dysenteric symptoms occurred from the 10th to the 15th, when natural stools were passed. He seemed gaining strength, but the wound was in no wise improved; the slough, on the contrary, threatened to spread, and two metacarpal bones lay loose in the centre of the sore; on consultation it was agreed to amputate the arm, but to this the patient peremptorily objected. The mortification now spread rapidly, and, to our infinite regret, he died of exhaustion on the night of the 23rd of January.

An unprejudiced review of the preceding details exhibits the sedative powers of the remedy in the most favorable light; and, although the patient died, it must be remembered that it was of a different disease, over which it is not presumed that the hemp possesses the least power.

The *second case* was that of Chunoo Syce (treated by Mr. O'Brien, at the Native Hospital), in whom tetanus supervened on the 11th of December, after an injury from the kick of a horse. After an ineffectual trial of turpentine and castor oil in large doses, two grain doses of hemp resin were given on the 26th of November. He consumed in all 134 grains of the resin, and left the hospital cured on the 28th of December.

Third case.—Huroo, a female, aged twenty-five, admitted to the Native Hospital on the 16th of December; had tetanus for the three previous days, the sequel of a cut on the left elbow received a fortnight before. Symptoms violent on admission. Tur-

pentine and castor oil given repeatedly without effect; on the 16th and 17th, three grains of hemp resin were given at bed-time. On the morning of the 18th she was found in a state of complete catalepsy, and remained so until evening, when she became sensible, and a tetanic paroxysm recurred. Hemp resumed, and continued in two grain doses every fourth hour. She subsequently took a grain twice daily till the 8th of February, when she left the hospital apparently quite well.

Mr. O'Brien has since used the hemp resin in five cases, of which four were admitted in a perfectly hopeless state. He employed the remedy in *ten grain doses* dissolved in spirit. The effect he describes as almost immediate relaxation of the muscles and interruption of the convulsive tendency. Of Mr. O'Brien's seven cases four have recovered.

In the Police Hospital of Calcutta, the late Dr. Bain has used the remedy in three cases of traumatic tetanus, of these one has died and two recovered.

A very remarkable case has recently occurred in the practice of my cousin, Mr. Richard O'Shaughnessy. The patient was a Jew, aged thirty, attacked with tetanus during the progress of a sloughing sore of the scrotum, the sequel of a neglected hydrocele. Three grain doses were used every second hour with the effect of inducing intoxication and suspending the symptoms. The patient has recovered perfectly, and now enjoys excellent health.

Beside the preceding cases I have heard of two of puerperal trismus treated in native females. Both terminated fatally, an event which cannot discredit the remedy, when it is remembered that the Hindoo native females of all ranks are placed, during and subsequent to their confinement, in a cell, within which large logs of wood are kept constantly ignited. The temperature of these dens I have found to exceed 120° of Fahrenheit's scale.

A curious coincidental proof of the use of hemp in these cases has very recently come to my notice. In the appendix to Sir James Murray's "Medical Essays," p. 16, dated Dublin 1837, occurs the following passage:—"Having written the substance of these pages (Sir James's work) to my brother, then assistant-surgeon of the 60th Rifles, at the Cape of Good Hope, he mentioned that a plant called *dyka*, or wild hemp, which grows on the eastern coast of Africa, is used by the natives for this purpose (the relief of puerperal convulsions), and that they all, male and female, smoke it to bring on perfect relaxation and relief from pain and spasm of any kind during its relaxing influence."

The preceding facts are offered to the professional reader with unfeigned diffidence as to the inferences I feel disposed to derive from their consideration. To me they seem unequivocally to show that when given boldly and in large doses the resin of hemp is capable of arresting effectually the progress of this formidable disease, and in a large proportion of cases of effecting a perfect cure.

The facts are such at least as justify the hope that the virtues of the drug may be widely and severely tested in the multitudes of these appalling cases which present themselves in all Indian hospitals.

Messrs. Hughes and Templar, eminent veteri-

nary surgeons of Calcutta, have used the hemp resin in five cases of horses suffering from tetanus; of these three have recovered. Dr. Sawyers, of the medical board, has cured a pony similarly affected.

Drs. Esdaile and Macrae have used the hemp with success; the former in a case of tetanus; the latter in one of convulsions from neuralgia of the testis, which had resisted every other remedy, and for which the removal of the organ had been decided on. In the "London Medical Gazette" Mr. Lewis gives a case of tetanus in which the hemp was used with great relief to the symptoms, although it did not effect a cure.

Case of Infantile Convulsions.

A very interesting case of this disease has recently occurred in my private practice, the particulars of which I have the permission of the family to insert in this paper.

A female infant, forty days old, the child of Mr. and Mrs. J. L., of Calcutta, on the 10th of September had a slight attack of convulsions, which recurred chiefly at night for about a fortnight, and for which the usual purgatives—warm baths and a few doses of calomel and chalk—were given without effect. On the 23rd the convulsive paroxysms became very severe, and the bowels being but little deranged two leeches were applied to the head. Leeches, purgatives, and opiates, were alternately resorted to, and without the slightest benefit, up to the 30th of September.

On that day the attacks were almost unceasing, and amounted to regular tetanic paroxysms. The child had, moreover, completely lost appetite and was emaciating rapidly.*

I had by this time exhausted all the usual methods of treatment, and the child was apparently in a sinking state.

Under these circumstances I stated to the parents the results of the experiments I had made with the hemp, and my conviction that it would relieve their infant if relief could possibly be obtained.

They gladly consented to the trial, and a single drop of the spirituous tincture, equal to the one-twentieth part of a grain in weight, was placed on the child's tongue at ten, p.m. No immediate effect was perceptible, and in an hour and a half two drops more were given. The infant fell asleep in a few minutes, and slept soundly till four, p.m., when she awoke, screamed for food, *took the breast freely*, and fell asleep again. At nine, a.m., 1st of October, I found the child fast asleep, but easily roused; the pulse, countenance, and skin perfectly natural. In this drowsy state she continued for four days totally free from convulsive symptoms in any form. During this time the bowels were frequently spontaneously relieved, and the appetite returned to the natural degree.

October 4. At one, a.m., convulsions returned and continued at intervals during the day; five drop doses of the tincture were given hourly. Up to midnight there were thirty fits, and forty-four drops of the tincture of hemp were ineffectually given.

5. Paroxysms continued during the night. At eleven, a.m., it was found that the tincture in use during the preceding days had been kept by the servant in a

* The nurse, I should have mentioned, was changed early in the illness, and change of air resorted to on the river, but in vain.

small bottle with a paper stopper; that the spirit had evaporated and the whole of the resin had settled on the sides of the phial. The infant had in fact been taking drops of mere water during the preceding day.

A new preparation was given in three drop doses during the 5th and 6th, and increased to eight drops with the effect of diminishing the violence, though not of preventing the return of the paroxysm.

On the 7th I met Dr. Nicholson in consultation, and despairing of a cure from the hemp, it was agreed to intermit its use, to apply a mustard poultice to the epigastrium, and to give a dose of castor oil and turpentine. The child, however, rapidly became worse, and at two, p.m., a tetanic spasm set in, which lasted without intermission till half-past six, p.m. A cold bath was tried without solution of the spasm; the hemp was, therefore, again resorted to, and a dose of thirty drops, equal to one and a-half grains of the resin, given at once.

Immediately after this dose was given the limbs relaxed, the little patient fell fast asleep, and so continued for thirteen hours. While asleep, she was evidently under the peculiar influence of the drug.

On the 8th October, at four, a.m., there was a severe fit, and from this hour to ten at night twenty-five fits occurred, and 130 drops of the tincture were given in thirty drop doses. It was now manifestly a struggle between the disease and the remedy; but at ten, p.m., she was again narcotised, and from that hour no fit returned.

On the three following days there was considerable griping, and on administering large doses of almond oil several small dark green lumps of hemp resin were voided, which gave effectual relief. The child is now (December 17) in the enjoyment of robust health, and has regained her natural plump and happy appearance.

In reviewing this case several very remarkable circumstances present themselves. At first we find three drops, or one-twentieth of a grain, causing profound narcotism, subsequently we find 130 drops daily required to produce the same effect. The severity of the symptoms doubtless must be taken chiefly into account in endeavouring to explain this circumstance. It was too soon for habit to gain ascendancy over the narcotic powers of the drug. Should the disease ever recur, it will be a matter of much interest to notice the quantity of the tincture requisite to afford relief. The reader will remember that this infant was but sixty days old when 130 drops were given in one day, of the same preparation of which ten drops had intoxicated the student Dimonath Dhur, who took the drug for experiment.

Use in Delirium Tremens.

I have given the tincture of hemp an extensive trial in this disease, and have had much reason to be gratified with its effects. In action it resembles opium and wine, but is much more certain than these remedies. I have no hesitation in saying, that in the cases in which the opium treatment is applicable, hemp will be found far more effectual. The changed state of mind it produces is truly wonderful. From the appalling terror which generally predominates, the patient soon passes into a state of cheerfulness, often of boisterous mirth, and soon sinks into a happy sleep. Of course there are many cases in which this, or any other, narcotic should not be employed.

Delirium occasioned by continued Hemp Inebriation.

Before quitting this subject, it is desirable to notice the singular form of delirium which the incautious use of the hemp preparation often occasions, especially among young men who try it for the first time. Several such cases have presented themselves to my notice. They are as peculiar as the "delirium tremens" which succeeds the prolonged abuse of spirituous liquors, but are quite distinct from any other species of delirium with which I am acquainted.

This state is at once recognised by the strange balancing gait of the patient, a constant rubbing of the hands, perpetual giggling, and a propensity to caress and chafe the feet of all bystanders of whatever rank. The eye wears an expression of cunning and merriment which can scarcely be mistaken. In a few cases, the patients are violent; in many, highly aphrodisiac; in all that I have seen, voraciously hungry. There is no increased heat or frequency of circulation, or any appearance of inflammation or congestion, and the skin and general functions are in a natural state.

A blister to the nape of the neck, leeches to the temples, and nauseating doses of tartar emetic with saline purgatives have rapidly dispelled the symptoms in all the cases I have met with, and have restored the patient to perfect health.

Conclusion.

The preceding cases constitute an abstract of my experience on this subject, and constitute the grounds of my belief that in hemp the profession has gained an anti-convulsive remedy of the greatest value. Entertaining this conviction, be it true or false, I deem it my duty to publish it without any avoidable delay, in order that the most extensive and the speediest trial may be given to the proposed remedy. I repeat what I have already stated in a previous paper—that were mere reputation my object, I would let years pass by, and hundreds of cases accumulate before publication; and in publishing I would enter into every kind of elaborate detail. But the object I have proposed to myself in these inquiries is of a very different kind. To gather together a few strong facts, to ascertain the limits which cannot be passed without danger, and then pointing out these to the profession, to leave them to prosecute and decide on the subject of discussion, such seems to me the fittest mode of attempting to explore the medicinal resources which an untried materia medica may contain.

It may be useful to add a formula for making the preparations which I have employed.

The *resinous extract* is prepared by boiling the rich, adhesive tops of the dried *gunjah*, in spirit (sp. gr. 835), until all the resin is dissolved. The tincture thus obtained is evaporated to dryness by distillation, or in a vessel placed over a pot of boiling water. The extract softens at a gentle heat, and can be made into pills without any addition.

The *tincture* is prepared by dissolving the extract in spirit of 835° density.

Doses, &c.—In *tetanus* a drachm of the tincture every half hour until the paroxysms cease, or catalepsy is induced. In *hydrophobia* I would recommend the resin in soft pills, to the extent of ten to twenty grains to be chewed by the patient, and repeated according to the effect. In *cholera*, thirty drops of the tincture every half hour will be often found to check

the vomiting and purging, and bring back warmth to the surface. My experience would here lead me to prefer *small* doses of the remedy in cholera in order to excite rather than narcotise the patient.

I have only further to add, that since the substance of the preceding memoir was first published, numerous cases have come to my knowledge in which the *churrus*, or resin prepared by the natives for smoking, has been used with little effect. This was the case in some experiments made by Dr. Pereira with *churrus* which I sent him myself. Age and adulteration have been probably both concerned in rendering this substance inactive. But with the alcoholic extract made from the tops in the way I recommend, the practitioner has only to feel his way, and increase the dose till he produces intoxication as the test of the remedy having taken effect.

Of all powerful narcotics it is the safest to use with boldness and decision.

I have given Mr. Squire, of Oxford-street, a large supply of the gunjah, and that gentleman has kindly promised me to place a sufficient quantity of the extract at the disposal of any hospital physician or surgeon who may desire to employ the remedy. My object is to have it extensively and exactly tested without favor or prejudice, for the experience of four years has established the conviction in my mind, that we possess no remedy at all equal to this in anti-convulsive and anti-neuralgic power.

London, January, 1843.

ON IODINE INJECTIONS

IN

SCROFULOUS DISEASES OF THE JOINTS.

By. M. BONNET,

Senior Surgeon to the Hotel-Dieu of Lyons.

All who have studied the history of abscess know that those purulent collections which are the result of acute inflammation are cured or open more or less quickly, and that scrofulous abscesses are seldom cured until they have become the seat of this acute inflammation. Hence, I was led to employ irritant injections in cases of scrofulous abscess of the joints, for the purpose of exciting that degree of irritation which is indispensable to their cure.

I shall divide the cases in which this mode of treatment was employed into two classes—viz., those relating to children, and those of adults.

In cases of children I avoided meddling with such as were not accompanied by tumefaction of the cellular tissue and signs of thickening of the synovial membrane, for I felt convinced that the treatment was not suited to cases of this kind. It was restricted to scrofulous abscess of the knee-joint, accompanied by swelling of the joint, evident symptoms of suppuration, and the formation of fungoid or lardaceous tissues in the synovial membranes and neighbouring parts. The following cases illustrate the effects of this mode of treatment:—

CASE I.—A. Roux, nine years of age, was admitted into the Hotel-Dieu on the 15th of March, 1841, with chronic inflammation of the left knee. The child is of feeble constitution and lymphatic temperament, but never had enlarged glands. Two months previous to

her admission the knee began to be the seat of dull pain, and swelled considerably; the disease, however, never prevented her from walking or freely bending the limb.

On the 16th of March the tumor was punctured; some pus mixed with blood escaped; alcohol at 32° was then injected into the joint. The pain became acute for about an hour, and the heat and tumefaction were increased.

April 1. The affected limb was placed on a splint, and frictions were made with the iodine ointment; the puncture made by the trochar has closed; no pus ever issued from it. The knee is large, and the soft parts indurated; a deep-seated fluctuation is felt, and the patella is raised up from the condyles. Compression was now employed by means of a bandage.

May 5. No sense of fluctuation; position of the patella natural; no pain in the joint.

June 7. The patient now walks about a little; the use of a moxa has considerably diminished the size of the knee; some fluid, however, has again been effused, and fluctuation is felt at the inner side of the knee.

The tumor was punctured again, and about four drachms of the tincture of iodine injected. This second injection excited but little reaction. The opening made by the trochar continued to furnish pus up to the 20th of June, and then permanently closed.

The patient left the hospital on the 20th of the same month; the knee was then in a satisfactory state; there was no trace of fluid in the joint, and the motions were free and without pain; it was, however, a little stiff and somewhat larger than the healthy knee from tumefaction of the bones.

CASE II.—Mary Notas, seven years of age, of lymphatic temperament, was admitted into hospital on the 7th of March, 1841. This child never had any scrofulous affection. The leg is flexed on the thigh; the knee painful, and fluctuation is felt on the inner side of the joint. The disease commenced two months previously without any apparent cause.

March 11. The tumor was punctured, and some thin pus discharged; alcohol at 32° was injected; the reaction was very slight.

15. The tumor was again punctured and alcohol injected as before; the operation was not followed by any unpleasant symptom; the skin of the joint was attacked by slight inflammation. Gentle pressure was now exercised by means of a bandage.

On the 6th of May the patient was discharged in the following state:—The knee is restored to its normal condition; the patella, which previously adhered to the condyles, is now perfectly movable; no sense of fluctuation; flexion and extension unattended by pain and freely executed; the patient walks well, but the knee is a little stiff; a slight discharge of serous fluid still takes place from the last puncture.

CASE III.—Mary Godet, seven years of age, of scrofulous temperament, was admitted into hospital on the 19th of April, 1841. For several years a very large tumor has existed on the inner side of the right knee, with fluctuation; the skin is neither hotter nor redder than natural; the cellular tissue and neighbouring soft parts have a doughy feel; the ligaments seem to be intact, but the joint is twisted laterally, the tibia being turned outwards; no treatment had been employed. During a period of three months

the tumor was punctured six times, and irritating injections as often thrown into the cavity of the joint, which contained sero-purulent fluid. The injections never produced any unfavorable symptoms; indeed, it was difficult to obtain any degree of inflammation in the affected parts. At the two first operations a considerable quantity of tincture of iodine was injected, but not the slightest irritation was produced, and the tumor remained as large as ever. On the third injection, when a quantity of brandy saturated with camphor was thrown in, the pus became yellow and some reaction occurred. A few days afterwards a considerable quantity of pus was discharged from the wound. The walls of the abscess underneath the triceps contracted; the joint, however, still contained matter, and two fistulous orifices furnished a good deal of pus; the skin retains its healthy color and is not adherent to the subjacent parts.

June 1. The tincture of iodine was injected and excited slight reaction; the knee diminished in size.

July 9. The balsam of Fioraventi, which is more irritating than the tincture of iodine, was injected, and produced slight inflammation, indicated by heat and redness of the skin of the knee; there was, however, no fever. The discharge of pus considerably diminished; one of the fistulous orifices closed.

20. Tincture of iodine injected for the last time; no signs of inflammatory action produced, but for four days a considerable quantity of pus was discharged. Towards the beginning of August all the fistulous openings had closed; there was no sense of fluctuation in the knee-joint, and the vast abscess under the triceps had collapsed. The knee was now easily flexed and extended, and the child was discharged, having nothing but a little stiffness and infiltration of the integuments about the knee.

The above three cases were the only ones in which I employed the irritating injections. In none did the injection of pure alcohol or of a saturated tincture of iodine produce severe inflammation. This is easily explained. The surface of abscess is always lined by false membrane of some thickness; and, on the other hand, irritants act with little force on persons of scrofulous constitution.

As to the effects of the treatment, the cases show that even after the injection of stimulating fluids the abscesses had a tendency to remain stationary, and it was necessary to repeat them more than once. This treatment extended over a period of two or three months, and even then a perfect cure was not obtained; but the disease was considerably mitigated, and it seems probable that in country air and with the aid of the usual means for improving the general health, a cure might be obtained within twelve months.—*Bull. de Therap.*, December 30, 1842.

RUPTURE OF TRACHEA.

In a child, fifteen months of age, laboring under an attack of bronchitis, after a few efforts to cough, an emphysematous tumor suddenly appeared in front of the neck and upper part of the chest. A small incision was made and gave exit to air. The child died on the second day; and on examining the body it was found that the trachea was lacerated to the extent of half an inch, just above the first ring.—*Caspar's Wochenschrift*.

REMARKS

ON THE

JAFNA OR CEYLON MOSS.

By M. GUIBOUT, Paris.

The moss of Jafna was brought to me for the first time two or three years since, by a person who had received a rather large quantity of it, and who was desirous of learning its name and uses. I told him that from its odor I suspected it to be an alga, which I believed to be unknown in France, and that it would be difficult to make any use of it. My visitor, who was a perfect stranger to me, stated that he would get rid of it. Some time afterwards Dr. Pereira, lecturer on materia medica and physician to the London Hospital, sent me a small parcel of it, labelled Jafna moss, and I had since endeavoured in vain to procure more, when M. Saillant, a pharmacien at Nantes, informed me that he had a marine moss in his possession which I believed to be the same, and of which he was kind enough to send me a certain quantity. Thus provided, with the aid of M. Lassègue, conservator of the rich and valuable library which M. Benjamin Delessert so generously placed at the service of those who are engaged in botanical researches, I found this production described, and figured, under the same name of Jafna moss, in the "History of the Fuci," of Turner. This plant is the *fucus lichenoides* of Turner, the *gracilaria lichenoides* of Greville, the *sphaerococcus lichenoides* of Agardh, and the *gigartina lichenoides* of Lamaroux. Botanists distinguish two varieties: the one, *the major*, is the *fucus lichenoides* of the herbarium of Linnaeus, represented by Turner, vol. II., pl. 118 *a*; the *fucus lichenoides* of Gmelin, "History of the Fuci," table 8, fig. 2; the *plocaria candida* of Nees von Esenbach, "Hort. Berol." table 6; the other, *the minor*, is the variety *B edulis* of Turner, table 118, fig. *d*; the variety *B enuis* of Agardh, from which must be excluded the *fucus edulis* of Gmelin or the alga *coralloides* of Rumphius, which is quite a different plant.

The figure *d* (table 118) of Turner, drawn from a specimen of the Jafna moss sent by North, represents very correctly that which I received from Messrs. Pereira and Saillant.

The Jafna moss is in whitish ramifying filaments, from three to four inches long when the plant is entire, and about the thickness of strong sewing thread. It appears to be cylindrical to the naked eye, but under the microscope it offers an unequal, and, as it were nervous or reticulated surface. The disposition of the branchings is sometimes dichotomous, sometimes pedalated, the most frequently simply alternate—that is to say, that a principal branch is sometimes divided into two equal branchings, equally separated from the primitive axis; that at other times the principal branch carries two or three ramifications on one side before it ramifies on the other, and that most frequently the principal branch offers smaller and merely alternate ramifications. The termination of the branchings is similar to their subdivisions—that is to say, the external is rather bifurcated, or formed of two parts equally separated from the common axis, which is the proper character of the alga *coralloides* of Rumphius, but not that of the *fucus lichenoides*. The branchings terminate most frequently by a solitary

slender prolongation, much thicker and more marked than the last ramification.

The moss of Ceylon has a slightly saltish savour, with something of the taste of sea-weed. It crackles under the teeth. It swells very little in cold water, and becomes neither glutinous nor transparent as does the Carragaheen, which is partly dissolved in it. It remains perfectly dry and fragile in the open air, showing that it has been deprived by frequent ablutions with fresh water of the hygroscopic salts of the sea-water. Iodine colors it of a blackish blue tint mixed with a red tint; it contains, therefore, a certain quantity of amylaceous matter. It also contains a kind of calcareous skeleton, which yields a large quantity of carbonic acid gas, when it is placed in water sharpened with hydrochloric acid.

Thirty scruples of Ceylon moss were boiled with one thousand scruples of water, until it was reduced one-fourth. There resulted seven hundred and fifty scruples of a mixture resembling thick vermicelli soup. The decoction was continued some time longer, and the liquid expressed, when a thick, opaque, whitish liquor was obtained, which, with thirty scruples of sugar and a small quantity of hydrolate of canella, formed one hundred and fifty scruples of a semi-opaque jelly, of considerable consistence, and very fragile, as it were—qualities owing, no doubt, to the calcareous salt which it contains.

This jelly has a very agreeable taste, on account of the aromatic which was added to it, and I think it must prove a very nourishing article of medical dietetics; but the marc of the decoction may itself be used as food. In fact, this residuum, even after having been subjected to great pressure, is in the form of semi-transparent filaments, in sufficient quantity to fill two common plates full, and may be dressed as cabbages or beans; such is, in fact, the principal use of this alga in the country where it is indigenous. It is often eaten raw, having been previously well washed and properly seasoned, or else cooked as vermicelli, which it resembles in form and consistence.

One hundred parts of Ceylon moss produce by calcination eleven parts of a greyish residuum, which preserves the form of the vegetable just as the phosphate of lime keeps that of the bones of the mammiferæ. This residue treated with water is partially dissolved; the liquid is completely neutral, thus precluding the presence in the plant of a salt with an organic acid. The liquid is scarcely rendered turbid by the nitrate of silver, but yields a considerable precipitate with the nitrate of barytes and the oxalate of ammonia. The Carragaheen moss, another alimentary fucus obtained from Ireland, behaves in the same manner, and it is remarkable to see two plants, living in the midst of salt water, not contain a sensible quantity of the chloruret of sodium, while they possess the accompanying sulphates in abundance. In the Carragaheen moss, the sulphates are principally those of soda or lime, and in the Ceylon moss those of lime and magnesia, which may be separated by treating the product of the evaporation of the two salts with alcoholised water, which dissolves the sulphate of magnesia only. It may then be easily recognised by its peculiar bitterness, and by its property of forming the ammoniaco-magnesian phosphate on the addition of phosphate of ammonia.

The portion of ash that the water does not dissolve is formed of carbonate of lime, which may be decomposed and dissolved by an acid, and of an insoluble residue, which consists of a mixture of small grains of roll quartz and of a sort of reddish clay.

By operating in this manner, the eleven parts of ash produced by one hundred parts of Ceylon moss, have been found to be composed of 1.3 of sulphate of magnesia, 2.6 of sulphate of lime, 4.6 of carbonate of lime, and 2.5 of quartz and clay.

Finally, I have ascertained that the Ceylon moss does not contain iodine, by moistening it with potass and calcining it. The product of calcination, treated with water, furnishes an alkaline liquid, which, when neutralised with an acid, does not undergo the slightest blue coloration on the addition of starch and sulphuric acid.

While speaking of the Ceylon moss, which some authors have regarded as the primary material of the celebrated nests of the Salangane swallows, I may say a few words of the nests themselves. Many opinions have been put forth with respect to the substance which composes them. According to one, the swallow draws from its crop or stomach, by efforts analogous to those of vomiting, all the materials with which it prepares its nest, and Sir Everard Home thought he had discovered in the crop of this swallow the secreting organ of this kind of mucus. But this opinion does not agree with the well-known fact that the swallows which live on the land fly incessantly in troops towards the sea-shore in the season when they build their nests, and seek there a mucous filamentous material which they carry back to their habitations. This matter, then, must form part of the material of the nest, but what is its nature? According to some writers it is of vegetable origin, and is composed of fuci abandoned on the sea-shore by the receding tide; among these fuci are reckoned the spongodium bursa of Lamaroux, the gelidium corneum of Lamaroux, the alga coralloides of Rumphius, or the fucus edulis of Gmelin, and the gigartina lichenoides of Lamaroux, or the Ceylon moss. According to others, it is of an animal character, and is composed of the soft parts of the molluscæ or of polypi, which have been partially digested by the swallows. This latter opinion is conformable to the chemical examination made by Doebereiner of the gelatinous matter of these nests; this substance having appeared to him to be of a perfectly animal nature and very analogous to mucus. But the first opinion may be equally true, because the nests of the Salangane swallow vary very much in their texture and in the nature of the materials of which they are composed. Some are found, in fact, almost wholly formed of a semi-transparent, hard, compact, and continuous gelatinous matter, like a dried membrane; these are the most esteemed, and it was one of these that Doebereiner analysed. Others offer a sort of network formed of this same gelatinous matter, of sea weeds and even of land lichens, to which the first substance serves as a sort of cement; others appear to be totally deprived of gelatinous matter, and are utterly rejected as food. M. Benjamin Delessert possesses a nest of the first kind, and the School of Pharmacy has one of the second, which was presented by M. O. Henry. This last has the shape of a shell or benitier, and is composed of four distinct layers.

The lowest or the first, which has been applied on the inclined plane forwards, which supported the nest, is of a brown color, dull, hard, rough, neither compact nor continuous, but formed the rather of agglutinated gelatinous filaments. Above this brown matter, and following the direction of the inclined plane, is gradually presented a layer of a more pure, white, transparent substance, of a gummy or gelatinous appearance, partly compact and membranous like that which forms the nest in the collection of M. Delessert; but partly also in the form of a colorless and transparent network, which resembles an elaborated and non-organised mucous matter. Above this gelatinous layer is found, especially on the outer side of the nest, a rather thick layer of a rosy-red fucus, with dichotomous nervous and compressed rami, somewhat resembling the *gracilaria* figured by Greville.

Finally, the upper and internal part of the nest is formed by a white, cylindrical, very fine land lichen, which, according to M. Montagne, is the *alecatoria crinalis* of Acharius. The whole is mixed here and there with a mucous froth, which keeps it together. Such is an exact description of the *Salangane* swallow's nest of the School of Pharmacy, which has suggested to me an explanation of the rather uncommon difference of texture and composition observed in the nests of the same species of birds. I think that these swallows are more induced to build their nests of a continuous gelatinous matter, which once dried in the air, is impermeable, the nearer they live to the sea, because they feel the necessity of sheltering the eggs and little ones from the cold air loaded with saline particles, which ascend into it from the rocks beaten by the waves, whilst those who construct their nests in places far from the shore, or in caverns sheltered from the sea-wind, feel a less need of employing this substance, and content themselves with forming a non-continuous network or cement. Besides, these nests, so highly vaunted, formed principally of an azotised matter partly digested and disgorged by birds, can be of no value but to a people whose religious ideas forbid the use of flesh, or who live in a great penury of food.

HARROGATE IN THE OLDEN TIME.—THE WATER CURE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—It is with much satisfaction that I, with many others, read the able and judicious exposures of the *water cure* made by Dr. Hastings and his contemporaries in and around Worcester. This most absurd and mischievous system cannot long be maintained, under whatever patronage, against the evidence of such practical and fatal results as have been so well stated by Dr. H. and in Mr. H. Cole's case in a preceding number.

But it is to you, the editors, that I design the following brief remarks. You state that "you shall take an early opportunity of making some remarks on the water cure, as practised by Priessnitz and his followers." In the performance of this acceptable service, beware how you ascribe even the credit of originality to the German boor. If such a science as ours is to be indebted to any such parties, it is some

small consolation to know that it is to our own boors that we owe the discovery, at least it was so practised by the Yorkshire boors, and even others of a higher rank, two centuries ago at Harrogate.

While preparing a small treatise upon these waters, fifteen or twenty years ago, their discovery and early history could not be overlooked. I soon found that many ages before either the chalybeate or sulphur springs were discovered, other springs or wells, under the name and patronage of the saints, such as St. Magnus, St. Robert, and St. Ann, occupied a prominent place in the public attention, and were well attested to have performed the most wonderful cures. These possessed no mineral powers, and are well described by Dr. Dean, the earliest writer upon these springs, as "clear limpid and pure simple waters; of such," he adds, "we have plenty, and of such reputation that two of them are sainted, to which have flocked, for bathing, innumerable herds of people, though they contain no mineral and are of no credit at present, for superstition and their reputation live and die together, their great and famed cures being rather feigned and imaginary than real."

The first mineral spring, a chalybeate, discovered at Harrogate, was in 1571. Dr. Dean published his "*Spaudarine Anglica*, or the English Spau Fountain" in 1626. Dr. John French, in 1651, "being commanded by his occasions down to the Span, in Yorkshire, and being prevented from his intended and speedier return by the then northern distractions to improve his time, as, also, for a more full satisfaction of his own profession, especially some worthy doctors in the South, presents them with a treatise on these waters." It is from this last curious and now rare work that I hasten to quote a few passages respecting the Yorkshire water cure, as stated by this "learned doctor" from the South. He is also laudably engaged, as is by no means altogether uncommon in the present times, in pulling to pieces the work of his immediate predecessor, Dr. Dean; in doing so he observes—"Whether Magnus or Mugnus be the true and original name of this well, it could never yet be ascertained; nor whether this well was sainted from its real virtues, or only supposed virtues attributed to it because first sainted, I will not now stand to dispute. Dr. Dean will not have any greater virtues attributed to it than to common springs, allowing it only a bare name and title. It seems the Doctor was no Catholic, or if he were, St. Mugnus must not be his intercessour." Dr. French then goes on to show "that waters oftentimes are impregnated with mineral virtues and spirits too, although insensibly; that handling of snow heats the hands and causes them even to burn by drawing out the natural heat. From all which it is apparent that, if any one enter into this water to bathe, and abide there but for a quarter of an hour, he will, as soon as he comes forth, presently become very hot (his body being all over red), and so continue a long time, although he walk in the cold air; nay, although he put not on his clothes." "Nay (he continues), many tender women, who dare scarce wash their hands in cold water, will adventure to go into it (St. Mugnus' well), although it be colder than ordinary water, with their linen about them; and when they be come forth, go to the next house and lay in their wet linen all night, and towards morning begin the sweat,

&c., &c., by which means (he adds) they are cured of many old aches and swellings, and hard tumors and agues." Still his common sense seems to revolt against this dangerous practice; and notwithstanding the well was sainted, which, with him, seems to have had considerable weight, he very properly adds—"Before any attempt the use of this cold bath let them first consult some able physitian."

I wish not to pursue the subject further, as it is in other and better hands. The work of Dr. Short, printed in 1734, and which was so highly esteemed at the time as to be published at the expense of the Royal Society, contains further particulars. Indeed, every writer upon these waters, from the time of Dr. French to my immediate predecessor Dr. Jarrett, including the facetious author of John Bunce, did all in their power by argument, satire, and ridicule to put down and abolish the abominable nuisance of the sweating system or water cure, with all its unwashed blankets, saturated bedding, close wooden beds, and other paraphernalia equally delectable, which they justly considered in almost every case no less injurious and dangerous, than disgraceful to Harrogate. How true the saying, that there is "nothing new under the sun!" Scarcely have fifty years elapsed since the very lowest of the vulgar in Yorkshire became literally ashamed of the disgusting process; when revived by a Lusatian peasant, it is eagerly taken up by too many of the English noblesse and others who ought to know better; and by their example again spreads its pernicious influence over the land to the inevitable loss of many lives.

I am, Gentlemen,

Your most obedient servant,

A. HUNTER, M.D.,

Late Senior Physician to the
Leeds Infirmary, &c. &c.

Hastings, Jan. 25, 1843.

P.S.—Should the sweating system (water cure) go forward at Harrow under the high sanction you connect with it, if early application is made, I doubt not one or more of the old sweating beds may yet be found in tolerable repair in some of the cottages at Harrogate. These would not only be a valuable prize in themselves, but prevent the trouble and expense, as well as the lowering of the national character, in sending to the German sweater for his model.

PATHOLOGY OF DEAFNESS.

Dr. Bochdalek, professor of pathological anatomy at the University of Prague, has published several cases, in the "Austrian Jahrbücher," illustrative of the condition of the ear in deaf and dumb persons. From a view of ten cases, the author concludes that the most common cause of deafness is absence of one or more of the semicircular canals, or their imperfect development or destruction by disease. In the third case, indeed, the semicircular canals, with exception of the two aqueducts (which were wanting), were healthy; the deafness seemed to be connected with a state of idiotcy. In the fourth case the whole of the internal parts of the ear were destroyed by disease. It may be worthy of further inquiry, how far a circumstance noticed by the author may exist in cases of congenital deafness; he observed in five cases that the anastomosing branch sent to the facial from the audi-

tory nerve near the internal auditory foramen was gently enlarged at the expense of the auditory nerve.—*Med. Jahrb.*, September, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, FEBRUARY 4, 1843.

It is universally acknowledged that a great disproportion exists between the supply of medical men at the present day and the wants of the community. We have overstocked the market and are becoming a nuisance to ourselves and to our neighbours. This truth is too evident and painful to require illustration; the evil of which it is the expression makes rapid progress, and demands the serious attention of all who look to the respectability—nay, the very existence of the medical profession.

We cannot establish a pestilential sliding scale and import the plague—for the benefit of distressed doctors, as we would corn for the support of starving operatives. The nature of our profession imposes on the medical man the duty of destroying his *pabulum vitæ* instead of increasing it. His efforts are directed to eradicate disease, yet without disease he cannot exist. The medical man may, therefore, be said literally to live upon his own vitals; at every ascent of the ladder he leaves an "airy nothing" underneath him, and if (by a stretch of imagination) we could suppose the whole community to be cured of disease, nothing would remain for the authors of universal health and happiness but to make their exit at the point of a bodkin or with a minim of prussic acid. Although our speech be somewhat figurative, the subject to which it refers is one of sad and pressing reality. The number of medical men yearly manufactured by the nineteen licensing bodies is infinitely too great for the demand. A question, then, obviously suggests itself, should any attempt be made to diminish the supply? We are not prepared to examine this question at present, or answer it either in the affirmative or the negative; but as it will probably present itself in various shapes during the discussion on medical affairs, which cannot be long deferred, we take this opportunity of laying before our readers the experience of a neighbouring country on this delicate point of medical polity. The following remarks, which bear strongly on the subject now alluded to, we condense from the "Gazette Medicale" of Paris.

On the 9th August, 1836, a royal ordinance was published to the effect—1, that no student should be permitted to take out his first inscription unless he had the diploma of bachelor of letters;* and 2, that

* For this diploma the student is examined during three-quarters of an hour in the Greek, Latin, and French languages; philosophy, ancient and modern history, and ancient and modern geography.

no student should be admitted to his first examination for the degree of doctor of medicine unless he possessed the diploma of bachelor of sciences. *

The object of this ordinance was, avowedly, to raise the respectability of the medical profession in France from the state of depression to which the concurrence of various circumstances had reduced it. This depressed state was chiefly indicated by an evident diminution of *esprit de corps* in the medical commonwealth; by excessive competition amongst medical men; the influx of charlatans; relaxation of professional morality; and, finally, by the wretched condition of the art of medicine as a means of existence for its professors.

Such clear symptoms of moral and material decay could not fail to awaken the attention of all well-thinking men. Various plans of medical reform were concocted; the Chamber of Deputies was beset by petitions; severe measures of repression were demanded against quacks and backsliding professionals; and "benevolent funds" were instituted for the succour of destitute doctors. The various plans thus imagined for the relief of the profession seemed excellent upon paper; but the difficulty lay in their execution. A law was promised, but that law still slumbers in the portfolio of the minister, and may, perhaps, never see the light.

The evils under which the profession labored were, however, too pressing to wait the expectant treatment of the minister, and an attempt was made to remedy them indirectly by the ordinance already alluded to. The objects of this regulation were the same as those invoked by all classes of medical reformers, but its chief results were twofold. It tended in the first place to diminish the number of medical men; and in the second, to increase the respectability of the profession, by augmenting the amount of scientific instruction and the proofs of capability in each individual member of that profession.

This twofold object being attained, it was clear that most of the moral and material evils which beset the profession would be greatly alleviated, if not radically removed. The event has justified the prudent foresight which dictated the ordinance. The radical source of the abuses complained of—viz., the shameful increase of quackery, the degraded condition of the medical profession, and its utter worthlessness as a means of honorable livelihood; all these clearly depended on an over supply of medical practitioners. The instant that the supply considerably exceeded the demand, it followed, as a matter of necessity, that vast numbers of medical men were driven from the legitimate means of existence. The field, previously divided between them in a fair and peaceful manner, now became the scene of hot and desperate contest.

* For this diploma the student is examined in mathematics, physics, chemistry, zoology, botany, and mineralogy.

The character of the profession was at once degraded, and a war of interests was substituted for an honorable competition of talent. Medicine was no longer regarded as a means of quiet, though dignified support; a few scandalous examples blinded men's eyes, and the science degenerated into the trade. The bonds of brotherhood being thus rent asunder, the commonwealth of medicine lost its character of fraternity, and became a battle field where every man's hand was raised against his neighbour. Individual success was regarded as the sole test of merit, and the acquirement of wealth the sole object of existence. The effects of such a state of things were inevitable. Science, the cultivation of the understanding, and literature, were regarded as mere accessories; the student contented himself with the amount of technical knowledge requisite to pass his examination, and the noblest of professions sunk into the most degrading of trades. This picture may be somewhat highly colored, but the representation is faithful.

The over-crowding of the profession is evidently the source of the chief evils under which we labor; if this be admitted the remedy is clearly indicated. The supply of medical practitioners must be reduced within limits somewhat commensurate with the demand for them. In a country like France no one would listen to any proposal for limiting the number of practitioners by legislative enactment; this is constitutionally impossible; but the same result may be attained indirectly by raising the standard of medical education, and thus cutting off the excess of candidates who have been attracted by the facility of entering the profession. Such, we repeat, was the object of the ordinance of 1836, which has completely realised the expectations founded on it. The following table illustrates the practical working of this regulation:—

Years.	University Pupils.	Pup. at Prov. Schools.	Total.
1835	- 1095	- 427	- 1522
1836	- 750	- 340	- 1090
1837	- 458	- 286	- 744
1838	- 295	- 301	- 596
1839	} Nearly as in 1838.		
1840			
1841			
1842	- 321	- 307	- 628

From the preceding table, it appears that the effect of increasing the standard of preliminary education was at once to reduce the number of medical students from 1522 to 1090. This diminution continued during the years 1837 and 1838; and the number then continued stationary, having arrived at what may fairly be regarded as the normal standard. During last year the number of new students admitted at Paris was 200; at Montpellier, 98; at Strasbourg, 23. In the preparatory schools of the provinces the relative diminution was by no means so great.

Such is the result of an experiment in medical re-

form, made on a large scale in one of the most enlightened kingdoms of Europe. We merely record it here as a subject for consideration.

ACADEMY OF SCIENCES, PARIS.

January 23, 1843.

CAPACITY OF THE LUNGS.

M. Bourguery read a memoir on the relation existing between the structure and functional capacity of the lungs in both sexes, and at various periods of life.

Experiments were made with a hydro-pneumatic apparatus on 70 persons (50 male, 20 female), from which the following results were deduced:—

The respiratory act, *ceteris paribus*, is more forcible in proportion to the youth and slender make of the individual. No condition of strength or health is capable of supplying the place of youth.

Respiration in the male is double the volume of that of the female for the same age. The maximum for both sexes occurs at the age of thirty years.

In a well-formed person of that age forcible respiration represents the quantity of 2.50 to 4.30 litres for the male; and of 1.10 to 2.20 litres for the female; in the boy of fifteen years 2. litres; and in the old man of eighty 1.35 litres.* The volume of air required for ordinary respiration gradually increases with age. The ratios between the ages of seven, fifteen, twenty, and eighty, are geometric, and represented by the numbers 1, 2, 4, and 8. The well-formed adult respire habitually the quadruple of the young child, and the double of the female or child of fifteen years, while the old person respire the double of the adult. This progressive increase, or necessity for a greater volume of air, expresses the diminished power of the lung as an organ of hæmotosis; hence, the latter decreases from infancy to old age, in proportion to the following numbers:—1, $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{8}$.

In forced respiration the permeability of the lung to air presents two periods; one ascending from infancy to thirty years, the other descending from thirty to old age. The former increases in a regular ratio of 1, 2, and 3, from seven to fifteen and thirty years; the latter decreases from 3 to $2\frac{1}{2}$ between thirty and fifty years; and from $2\frac{1}{2}$ to $1\frac{1}{2}$ between fifty and eighty years of age.

Taken on the whole, the respiration is trebled within the space of twenty-three years in youth, and increases by 1-9th for each year. After manhood it diminishes by 2-5ths in twenty years, or by 1-100th for each year. From fifty to sixty years it decreases by 1-5th in ten years, or 1-50th for each year. And in old age, from sixty to eighty, it diminishes by nearly $\frac{1}{2}$ or 1-20th for each year. This gradual decline of the respiratory power must contribute in great measure to the gradual extinction of the powers of life as old age advances.

This latter proposition is further confirmed by the fact that the ratio of ordinary to forcible inspiration diminishes as the age advances. At seven years of age this ratio is as 1 to 12; at fifteen, as 1 to 10; at twenty, as 1 to 9; at twenty-five and thirty, as 1 to 6; at sixty, as 1 to 3; at eighty years of age, as 1 to $\frac{1}{2}$

or $\frac{1}{3}$. Thus, the young man has in reserve for violent exertion an immense respiratory faculty, while the aged person is quickly "winded."

The respiratory faculty is gradually worn out by the laceration of the capillary ærian and sanguineous canals; this laceration occurs, in a greater or lesser degree, in all powerful respiratory efforts. It begins at an early period, and increases gradually to old age, as a simple consequence of repetition of the respiratory act. It is increased by all diseases of the lungs. In its most aggravated form this state of the lung causes a circulation of imperfectly oxygenated blood, and reduces the decrepid octogenarian to the locular lung and imperfect respiration of the reptile.

CANCER OF THE FACE.

M. Souberbielle writes to say that, for the last sixty years, he has been in the habit of employing, with success, the arsenical paste of his friend and relation, Frère Côme, in cases of cancer occupying the nose and lips.

SURGICAL SOCIETY OF IRELAND.

January 14, 1843.

OVARIAN TUMOR DISCHARGED THROUGH RECTUM.

Dr. Houston exhibited to the society a specimen of ovarian disease, which he had received from his friend Dr. Irwin, of Castleblaney, and of which the progress and final issue were, perhaps, unique. The tumor was as large as an orange. It consisted chiefly of hair, bone, and teeth, and had been extracted from the anus. The patient was a countrywoman, named Dawson, aged about fifty, and the mother of seven living children. For nine years she had been subject to continued lumbar and rectal pains, with alternations of constipation and diarrhœa. For the last two years she has suffered from constant uneasiness and draining of blood and mucus from the rectum; and in order to allow the bowel to be emptied, she had been obliged, on every occasion of going to stool, to introduce her finger and push aside some resisting body which obstructed the passage. In this state she applied to Dr. Irwin about eight months ago. After making a careful examination, Dr. Irwin judiciously determined on an attempt at extracting this foreign substance, whatever it might be. He succeeded in pulling a certain amount of it through the external opening; but then found it stopped by a fold of the mucous membrane, which embraced it tightly around the centre, where the mass appeared narrowed by a circular contraction. He then divided the mucous membrane with a scalpel at this part, and was pleased at finding the entire come away unbroken. The mucous membrane was vascular and relaxed; some bleeding occurred from the wound of the knife, but it was arrested by plugging the rectum. It was through the lateral and posterior wall of the rectum that the tumor made its way into that bowel. The woman quickly recovered, and remains (eight months) quite well in health and free from any disease or inconvenience in the rectum. Such, Dr. Houston said, was the account given to him of this singular case by Dr. Irwin, and it now remained for him to describe the tumor, and to offer a few observations on the

* The litre is 1.760 of an English pint.—Ebs.

reasons which would, he thought, justify him in regarding it as ovarian.

The tumor, when first examined, was about the size of a large orange, narrowed about the centre. It was very heavy and dense, and emitted a faecal odor; one end, the larger, presented an appearance like dried clay, matted together with hairs; the other, somewhat smaller, was equally dense; the latter was covered with a firm gristly substance, like that of the gums, and presented on one side the enamelled crowns of several teeth. The two pieces were so firmly joined together as to constitute one solid mass. On being macerated for several weeks, the exact nature of the tumor became more manifest. The smaller end (Dr. H. here exhibited the specimen) was found to consist of a perfect organised bone, a sort of misshapen lower jaw, with eleven teeth growing out of it, in sockets, and not in a continuous row, but irregularly jumbled together in one place as close as they could lie. There were two incisors and one canine tooth, the rest were bicuspid and early molars. The teeth were all tolerably perfect, some being a little bent and others short. The enamelled crowns were sharp and well defined. The larger piece, of which the mass was composed, was of a totally different nature. According to an analysis made by Dr. Aldridge, it consisted of a mass of hairs matted together by ammoniacal magnesian phosphate, biliary matter, and vegetable detritus. It adhered very firmly to the osseous piece, especially to the projecting extremities of the teeth, some of which were broken off with it in attempting a separation of the two portions. This end of the tumor was obviously the more recent production, and, according to Dr. Houston's opinion, must have been formed in the rectum by the slow accumulation of the faecal excrementitious deposits, arrested by the hairs and teeth of the primary tumor, which, in being eliminated from the body, had been brought into contact with, and had produced ulceration in, the tunics of the rectum. The operation of Dr. Irwin was in this case, therefore, only the completion of the last stage of the tedious, but sanitary and well directed efforts of nature to the same end. Dr. Houston remarked, that as the woman, the subject of this tumor, still survives the discharge of it, there must remain some doubt as to its source. He thought, however, that its origin had been in the ovarium, and gave a lengthened exposition of the nature, causes, and most common seat of such tumors, with a view of proving from precedent and analogy, that such was the fact. Diseases of this kind were occasionally met in other parts of the body, and even in the bodies of men; but in these cases the tumors rarely consisted of anything more than a fatty substance interspersed with hairs. Respecting such hairs, it was remarkable that they were never found except in connection with fat, and that they always resembled more the hairs of the head than those of any other part. The occurrence of bone and teeth in such tumors is more rare, and seldom met with, except when the disease has its seat in the ovarium. A case of a tumor containing hair and teeth is related by Scortegiana as being located in the mesentery of a young woman. Another case is related by the same author of a tumor formed of bone, teeth, and hair, being discharged from the uterus after giving birth to a dead

infant. And Osiander reports an instance of an analogous kind to the latter, in which the infant was born alive. In both these cases the uterus itself was most probably the seat of growth of the tumor.

With the exception of these and a few others, all the recorded instances of tumors of the nature of that furnished by Dr. Irwin have been ovarian.

Dr. Houston here exhibited several specimens of this kind from the museum of the College of Surgeons, and in particular one which had been presented by Dr. Brunner, of Dundalk, in which the ovarium thus changed had, in addition, and perhaps as a subsequent malady, become the subject of dropsy, producing in it enormous enlargement. Dr. Houston stated, that from the observations of pathologists, it would appear that such tumors in the growth take the follow course:—1. That a cyst filled with serum is formed, either on the surface of the ovarium, or, what is more common, in its interior; that this primary fluid gives place to a deposit of a substance bearing many of the characters of fat; that out of this grow the hairs; then, that ossific matter is formed; and lastly, that from this bone teeth spring up. He showed still farther that the teeth, which constitute so remarkable a feature in these cases, resemble ordinary teeth in many particulars. Their mode of development is the same. They are formed of capsules and gelatinous pulps; the crowns and enamel are formed first, and the fangs subsequently. The length of time occupied in their formation is perhaps also about the same. A case is reported by Coley in which the growth of an ovarian tumor had been traced to about five years, and where the teeth which had been formed might have been the teeth of a child of about that age. Dr. Houston suggested, that if the commencement of the growth of the tumor in Dr. Irwin's case were to be laid about the period when the patient began to complain of uneasiness—that is, nine years back, the teeth which the tumor presented, which were, in fact, the teeth of a child about that age, were perfectly in keeping with such a view.

Teeth of different orders are found nearly in the ordinary proportion, and would appear to be formed nearly in the ordinary succession. Milk teeth, without fangs, and which had been pushed away by the secondary growth, have been found floating loose in the fluid of such ovarian tumors. The number of teeth is very various; they are usually few; sometimes they have been found to correspond in number to a good and perfect set; at other times they have appeared, from their number, to represent both primary and secondary sets; and one remarkable case is related by Plouquet of a female, aged twenty-two, sterile, in whom the ovarium contained upwards of 300 teeth. Dr. Houston then enumerated several cases to show that the functions of reproduction are not necessarily arrested by the presence of such a state of disease. In many of these, women were known to have borne children while carrying tumors of hair and teeth in one of the ovaria, in which respect the case furnished by Dr. Irwin did not make any exception. The consequences and final issue of such tumors are very various; they usually produce derangements by interfering mechanically with the functions of some of the neighbouring organs; they have

been sometimes removed by suppuration or by operation; in two of the cases above mentioned, the tumors and their contents were discharged by the uterus in parturition. A case is reported by Dr. O'Brien, wherein two teeth, considered to have been, perhaps, originally ovarian or uterine, became the nuclei of calculi in the urinary bladder, and were removed by him by operation (see "Dublin Medical Journal," vol. V). But there is, perhaps, no case on record of the tumor being got rid of in the manner and with the successful result that has attended on the case communicated by Dr. Irwin. The only case which at all approaches it in this respect is one by Coley, in which the tumor attached itself to the intestine, but in which the individual lost her life by hæmorrhage from that spot.

On the question of the original cause of such tumors in the ovarium, Dr. Houston said, that he would state only summarily the opinions of physiologists on the subject. The idea originally entertained that such teeth were swallowed, has every argument and fact against it. Dawson, in whose ovary so many teeth existed, has to this day almost every tooth in her head perfect. All such teeth are, no doubt, formed by growth in the parts in which they are found. Some authors suppose them to be supernumerary parts formed by the same act of fecundation as that which produced the body in the interior of which they are found. Some suppose them to be the result of impregnation, and that they are nothing more than an imperfect extra-uterine fetus. Others, again, and among these Meckel, consider them to be the result, not necessarily of impregnation, but of an unnatural excitement of the genital organs. It should, besides, be stated that some German physiologists are disposed to regard such anomalous productions as having some connection with a morbid state of the brain.

PECULIAR APPEARANCES IN CATARACT.

Dr. Jacob called the attention of the society to an appearance which presented itself in the eye of a person upon whom he lately operated for cataract, in the City of Dublin Hospital. The man, thirty-three years of age, was, he said, what is called amaurotic, or, in other words, his vision was very defective, even in the other eye, which was free from cataract, and, therefore, he was unwilling to operate, from a conviction that he had an unsound retina to deal with; but at the earnest solicitation of the patient he consented to let him have the chance which the experiment afforded. The cataract was lenticular, and, although more of an amber tint than is usual at this time of life, was otherwise not uncommon. The lens freely broken up with the needle through the cornea, and was easily separated into pulp and fragments, some of which fell into the anterior chamber, and no inflammation requiring attention followed. In a month the greater part was absorbed, and in six weeks the whole, leaving a shred of opaque capsule attached to the margin of the pupil, but not large enough to interrupt the passage of light. As the cataract, however, disappeared, the iris became studded with delicate brilliant scales of metallic lustre, so numerous and large as to be easily visible with the naked eye, and still more conspicuous with the assistance of a lens. They were irregular in form, but with surfaces so plane and polished that they reflected the light freely, resembling,

in a remarkable manner, the particles of mica in granite. The appearance continued until the man was discharged, having been visible for about a month, and may probably continue so for some time. Sight, as had been predicted, was not restored, the retina being unsound. Dr. Jacob reminded the society that earthy, and perhaps crystalline, deposits in the lens and its capsule were not very uncommon, and that they had been met of so dense a nature as to lead to the application of the term ossification to them, although not to be considered at all of the nature of real bone. They are probably phosphate of lime, or perhaps ammonio-phosphate of magnesia with phosphate of lime, but that he left to the chemists to determine. He said that on another occasion, in breaking up a cataract of somewhat the same appearance, he was surprised to see a quantity of what appeared to be delicate needle-shaped crystals diffused among the fragments, but these disappeared with the cataract as it was dissolved. He also exhibited a drawing of a capsular cataract, the consequence of injury, which he had removed successfully, and which had presented on the surface an appearance of such metallic lustre that he was obliged to make the artist represent it with silver leaf, and added that these brilliant cataracts, in a less marked form, were not very uncommon, but in all of them the disease was of long standing. Early deposits, he observed, were frequently found in the body of the lens in horses blind from cataract, consequent on inflammation. The shell of bone sometimes found within the choroid of disorganised eyes, and generally called ossified retina, he observed was probably of the same nature as these lenticular deposits.—*Dub. Med. Press.*

POOR-LAW MEDICAL RELIEF.

[The following is a copy of a memorial recently sent to Sir James Graham, from the council of the Provincial Medical and Surgical Association, which we publish at the request of that body.—*Eds.*]

*To the Right Hon. Sir James Robert Graham, Bart.,
Her Majesty's Principal Secretary of State for
the Home Department.*

SIR,—We, the undersigned members of the council of the Provincial Medical and Surgical Association, on behalf and by authority of that body, beg leave to submit to you the following statements and suggestions relative to the administration of medical relief under the Poor-law Amendment Act, and respectfully to solicit your consideration of the subject, with a view to some legislative enactment in the ensuing session of Parliament.

Whilst we feel it due to the poor-law commissioners to acknowledge that their recently framed regulations may, when carried into operation, remove some of the abuses, which, during the last seven years, have afforded to the medical profession so many and serious grounds of remonstrance and complaint, we are still strongly impressed with the necessity of further amendments in this department of parochial relief.

The most beneficial—we may almost say the only unexceptionable—provisions of the medical order of the poor-law commissioners, dated March the 12th, 1842, are the abolition of appointment by tender, and

the establishment of fixed rates of remuneration for certain operations, accidents, and attendance in cases of midwifery; but when we consider, on the other hand, the limited amount of benefit to be derived from these enactments, if unaccompanied by more decisive measures, and, on the other hand, the imperfect and unsatisfactory nature of other regulations contained in that order, we feel compelled to appeal again to her Majesty's government for a more complete reform of the system.

1st. The most serious defect in the recent medical order is the absence of any specific directions for the regulation and increase of medical salaries.

The principle of a fixed remuneration has been adopted, and its propriety thereby admitted, with respect to midwifery and surgical operations; but no reasonable payment has hitherto been provided for the great bulk of union medical duties, which are still left to the varying and arbitrary estimates of different boards of guardians, who for the most part erroneously imagine that they are protecting the interests of the rate-payers, by awarding the lowest possible salaries to the medical attendants of the poor.

The vast amount of the exertions of union medical officers, and the inadequacy of their remuneration, may be proved by a reference to some statistical facts published in the last annual Report of the poor-law commissioners.

The total number of *in-door* paupers relieved during the last quarter of the year 1840—41, throughout England and Wales, is stated to have been 192,922,* the total number of *out-door* paupers during the same period, 1,108,006.

Now the number of cases of sickness attended in *workhouses*, during that year, must have exceeded the number of *in-door* paupers relieved in its last quarter; while the cases occurring among the *out-door* paupers may, at the lowest computation, be estimated at two-thirds of their number.

Thus at least 931,592 cases of sickness and accident among *acknowledged* paupers were attended during the year ending March 25th, 1841; for which period we are informed by the poor-law commissioners† that the total cost of medical relief was £154,054, giving an average of only 3s. 3½d. for each case.

This, it may be observed, was the precise rate deduced from the medical returns of eight counties for the year 1837.

It was shown by the medical practitioners examined before the parliamentary committee in 1838, that on the most economical estimate, the salaries of union medical officers should afford, *on the average*, not less than 6s. 6d. per case for regular paupers, and 10s. per case for casual paupers.‡

Dr. Kay, the assistant poor-law commissioner, in his evidence before the same committee, fully assented to the fairness of that estimate, and recommended it for adoption.§

Not only have these suggestions been wholly neglected, the remuneration still continuing barely sufficient to cover the expense of medicines and appliances, but the duties of union medical officers (de-

pending on the number of paupers, and manifested by the *general* expenditure for the relief of the poor), have increased during the last three years in a greater ratio than the expenditure on account of medical relief.

Thus we deduce from the same Report that the relative proportion of *medical* to *general* expenditure was, in 1839, 3.37 per cent.; in 1840, 3.30 per cent.; and in 1841, only 3.23 per cent.

We cannot pass over these important facts without expressing our conviction that medical relief, including medicines (which should be provided by the unions, not by the medical officers) cannot be properly supplied to the poor of our present population for less than £350,000 per annum.

This estimate, which is about 7 per cent. on the general expenditure for the relief of the poor, will be found to coincide with the rates of payment recommended before the parliamentary committee in 1838.

We hope that the proposed expenditure will not be deemed more than justice to the profession, when it is recollected that medical aid is provided by law for only a small proportion (probably less than one-third) of patients unable to purchase it for themselves; the remainder being relieved gratuitously, either by the private benevolence of medical practitioners, or by the numerous medical charities which adorn and ennoble this country.

2nd. With respect to the details of any plan, we are fully aware that in determining the limits of remuneration, it would be "impossible" for the poor-law commissioners to put forward "any one method of payment, or any one rate of remuneration, as equally applicable to all cases and all circumstances."†

To our knowledge, this was never proposed by the medical profession, certainly never by this association.

The combination of *two* modes of payment, recommended originally by Dr. Kay, has been generally supported by the profession; nor does there appear any reason why either of those methods singly, or an equivalent fixed salary, should not be adopted in certain localities, instead of the arrangement referred to.

A sum being fixed for each union according to its population, area, number of sick paupers, and general standard of medical remuneration, it would be far from "impossible," not even difficult, for any well-informed person, possessing both official authority and the confidence of the medical profession, to apportion this sum among the several parishes of the union, according to their respective requirements and circumstances.

3rd. The necessity of considering distance in rural unions, as a main element of medical remuneration, is mentioned by the poor-law commissioners as one reason for not defining a uniform scheme of payment.‡

But we submit that, were the propositions of this association adopted, the assumed difficulty would be found to have no real existence.

We beg to suggest, as on a former occasion, that the payment, on account of distance, should constitute a distinct item in the medical salary, and bear a fixed proportion to the other (permanent) items—namely,

* Page 611 of that Report.

† Pages 9 and 28 of same Report.

‡ Parliamentary Report, page 22.

§ Evidence, 10,609.

* Page 9.

† Page 27, 8th Annual Report.

‡ Page 27;]

medicines and medical attendance in towns or within a mile of the surgeon's residence.

It would then be imposed only on parishes beyond that distance; and the rate (whether per head of the population, per pauper, or per case) having been determined for the whole union, one-fourth part of such rate might be added for each mile of the distance between any parish and the district medical officer's residence.

The advantages of such an arrangement are obvious. It would provide for every variety of circumstance without disturbing the calculation of settled limits of medical remuneration. It would enable the commissioners to carry into effect the hitherto neglected recommendation of the parliamentary committee—that medical relief should be made a *parochial*, not a union or district charge.* It would afford a strong inducement to the guardians to appoint the nearest qualified practitioner to each parish, and thus effectually tend to reduce the extent of medical districts.

4th. The last mentioned consideration leads us to advert to the inefficiency of the new regulation respecting the extent of medical districts.

The commissioners have directed that in future no district shall contain more than 15,000 inhabitants, or an area of more than 15,000 acres. But we beg to represent that a population of 15,000 is by far too numerous, and an area of 15,000 acres generally too extensive to be entrusted to any one medical officer. The inutility of this regulation must soon be apparent in the great majority of unions, whilst in others its impracticability, "for some time" to come, is confessed by the commissioners. Had they thought fit to adopt the suggestions of this association—namely, that in districts where the area might unavoidably exceed 8,000 acres the population should not be more than 4,000—and where the area might exceed 1,000 (or 2,000 acres) the population should not be more than 6,000—and that no district, however small in area, should contain more than 10,000 inhabitants—every part of the country would be properly supplied with union medical officers, and we firmly believe that no board of guardians would find it necessary to engage practitioners not already resident in the neighbourhood.

5th. Some of the most eminent members of our profession have long and repeatedly urged the necessity of a joint surgical and medical qualification for the persons appointed as medical officers. In their recent compliance with this suggestion, the commissioners have limited the qualification in surgery to the diploma of the *London College of Surgeons*, and have since attempted to justify this exclusive measure by representing the diplomas of the Scotch and Irish colleges as not recognised by English law.†

We cannot admit the correctness of this statement, so long as surgeons of the army, navy, and Hon. East India Company, may derive their diplomas from Edinburgh and Dublin, as well as from London, and especially whilst members of any "one of the Royal Colleges of Surgeons" are legally eligible to the appointment of surgeon to *English* prisons.‡

Besides, the commissioners could scarcely have been ignorant of the fact that the authority of the London college extends only within seven miles of the metropolis, and that it possesses no more legal jurisdiction over the rest of England and Wales than do the colleges of Edinburgh, Glasgow, or Dublin.

Therefore, to recommend the London College of Surgeons as the only *legal* source of qualification, where the law does not require its diploma, is manifestly to convey an erroneous impression, and cannot fail to inflict an unmerited injury on other learned and equally efficient collegiate bodies. We trust that this endeavour to promote the interests of a particular college will be defeated; at the same time we beg leave to offer our thanks for your promise of bringing forward some efficient remedy for that anomalous and unsatisfactory state of our medical polity, which may have led the commissioners into this error.

6th. The next point to which we solicit your attention is the continuance of the system of *contracts* for the services of medical practitioners. By the orders of the poor-law commissioners and by the act for extending the practice of vaccination, the guardians are directed to *contract* with their medical officers—a mode of appointment which is unnecessary to secure the proper performance of duty, and repulsive to the feelings of men of liberal education.

It is our anxious wish, therefore, that these provisions may be repealed, so that members of our profession may be legally engaged, without requiring the execution of contracts, which are not imposed on members of the other learned professions, when appointed to any offices in the poor-law unions.*

Finally, we beg to observe that the commissioners in their last report suggest a legal provision for the levy of a rate in aid of the funds of *medical clubs*, established, at their suggestion, by the guardians of several unions. We view with considerable apprehension the extension and legal establishment of institutions, which have not received the countenance of the medical profession, and which in their present form are calculated not only to injure its interests and impair its respectability, but to mislead and disappoint the poor subscribers.

We therefore respectfully request that no such legal provision as the commissioners suggest may be made until the entire system of medical clubs shall have been submitted to an impartial and rigid investigation, and, if possible, so amended that the majority of medical practitioners may be induced to promote its general adoption.

We have the honor to remain,

TREATMENT OF TINEA FAVOSA.

The parasitical origin of this disease is regarded as demonstrated by the physicians of the General Hospital, Vienna. A division of this hospital is set apart for the treatment of chronic diseases of the skin, and the experiments there made in the treatment of tinea favosa seem to show that the local application of caustics (lunar caustic, caustic potass, &c.) is the only mode of treatment followed by beneficial results. Several cases were cured within two months by the local use of a saturated tincture of iodine.

* Parliamentary Report, page 24.

† Page 27.

‡ 4 Geo. IV. c. 64, s. 33.

* Page 29.]

RETROSPECT OF THE MEDICAL SCIENCES.

POISONING BY ARSENIC.

Mr. Hilton has published the particulars of a case of poisoning by arsenic, which terminated fatally ten hours after the ingestion of the poison. The patient had taken more than a quarter of an ounce of arsenic, partly powdered, and partly in small broken fragments. On examination of the body ten hours after death, about a pint of dark brown mucous fluid, containing a few small granules of arsenic, was removed from the stomach, when a large quantity of semi-transparent, glairy, adhesive mucus was found covering the internal surface of that viscus, particularly along the smaller curvature, towards the pylorus. This mucus contained, in different parts, small portions of the poison, the largest accumulation being situated about an inch and a half from the pylorus; there was another nearer the œsophagus. The whole surface of the mucous membrane, with the exception of a small portion near the œsophagus, was corrugated and raised into ridges, and presented a most beautiful rich red color from inflammation; this was most conspicuous at the pyloric extremity, near the greater accumulation of the poison.

The contents of the stomach, the blood, and portions of the liver and spleen, were subjected to chemical analysis by Mr. Taylor.

About two drachms of arsenious acid, in the state of coarse powder, was found in the stomach, and was easily separated from its contents by levigation. It was readily recognised. Although so large a quantity of the poison was found in the viscus, the fluids contained therein did not yield any tangible evidence of its presence, showing that no perceptible portion had been dissolved, the result conveying a caution to those engaged in performing analyses in suspected cases, that they must chiefly rely for the detection of arsenic on an examination of the solid contents, or of the parietes of the stomach. The explanation of this fact is well known to be that arsenic is but little soluble in cold liquids under any circumstances, and that it is still less soluble in liquids containing organic matter than in those that are free from it.

About four ounces of the blood obtained from the right cavities of the heart was evaporated to dryness with a quantity of nitrate of potash, sufficient, as was supposed, to produce perfect deflagration. The dried residue, which was of a dark brown color, weighed 584 grains. Deflagration was effected in a platina crucible, but more nitrate of potash was required to render it perfect. The mass then underwent the igneous fusion, and the crucible was removed from the fire. The saline residue was then acted on by sulphuric acid, which was added in excess; the nitric acid of the undecomposed nitre was driven off, and when the bisulphate of potash began to be deposited, the clear liquid portion was poured off, concentrated in a small capsule, and set aside. The saline deposit was washed with warm distilled water, and a strongly acid liquor was obtained, which was tested in Marsh's apparatus. The remaining liquid was evaporated to dryness, and the dry saline residue was heated in a tube with soda flux. From neither experiment were arsenical indications produced, so that, as far as the

blood was concerned, the results were decidedly negative.

The portion of liver examined weighed seven ounces; it was taken from the large lobe, was rather full of blood, but perfectly healthy in structure. It was cut up into small pieces, and carbonised by concentrated sulphuric acid, aided with heat. The time required for the perfect carbonisation of the liver was three hours, and the dried carbon obtained weighed one ounce and a half. This product was finely powdered, treated with a mixture of one part of absolutely pure hydrochloric to three of nitric acid, in quantity sufficient to moisten the ash, and then heat was applied gradually, and the mass stirred, until every particle of the acid had been expelled. There remained a dry, friable, black powder. The object of this process was to oxidise to the highest degree any arsenic that might be present. The dry residue was boiled in distilled water, which, when filtered afterwards, gave a light yellow colored, highly acid liquor, a portion of which, tested with nitrate of silver and ammonia, yielded abundant evidence of the presence of phosphates. The remainder was acidulated with sulphuric acid, which rendered it slightly turbid, and then introduced into Marsh's apparatus. On burning the gas, the flame at once presented the blueish white color indicative of the presence of arsenic; and accordingly, on placing over it plates of glass, twelve minute metallic deposits, bearing all the physical characters of arsenic, were procured in a few minutes. The test, however, seemed to be near the limit of its range, the quantity of metal deposited being imponderable, and insufficient for the safe application of those chemical tests which have been recommended for the identification of arsenical sublimates. A saucer, the interior of which was moistened with a solution of ammoniaco-nitrate of silver, was then held above the flame, at about half an inch distance, when a faint yellowish precipitate took place, which was considered to be arsenite of silver. The result of this experiment, therefore, showed that arsenic was really present in the substance of the liver, although in extremely minute proportion.

The spleen weighed three ounces; it was rather small, and appeared to contain less blood than usual. It was divided into small pieces, carbonised by concentrated sulphuric acid, the ash treated with nitrohydrochloric acid, and the residue after evaporation digested in warm distilled water. The filtered liquid obtained from this digestion was strongly acid, and more highly colored than that from the liver. It amounted to twelve drachms, two of which were first tested in Marsh's apparatus, without any evidence of arsenic having been obtained. The remaining ten drachms were then concentrated by evaporation to one and a half, and afterwards tested in the apparatus, but with the same result. Thus, then, it was evident that the spleen did not contain any arsenic.

Mr. Taylor remarks on the preceding experiments, that it may appear extraordinary that while the liver gave evidence of its containing traces of the poison, none was found in the blood or spleen. The objection that, in the case of the liver, arsenic might have been

accidentally introduced, he combats by averring that the apparatus was new, and the chemical tests ascertained to be perfectly pure, previous to their having been used. He accounts then for the non-discovery of the poison in the blood by the small quantity operated on, and by the nature of the process adopted; the deflagration of the nitrate of potash and the ash being carried on at rather a high temperature, the arsenic is likely to be partially or entirely dissipated. If then there should happen to be but traces of the poison in the substance analysed, none will be discovered. That this explanation is the correct one, is rendered likely from an experiment instituted by Dr. Rees, who operated on four ounces of blood from the same subject, and obtained faint traces of what he considered to be arsenic, by the use of Marsh's apparatus. In his experiments, several deflagrations were performed, only a small quantity of nitrate of potash being added each time. The process was performed in a chinaware dish, and the heat applied by a spirit lamp; there was, therefore, less probability of the arsenic being dissipated. With respect to the spleen, the same carbonising process having been pursued as in the case of the liver, the non-detection of arsenic in this organ can only be referred to the quantity of animal matter experimented on having been too small. The spleen weighed three ounces, and as only very faint traces of arsenic were found in more than double the quantity of liver, it does not appear extraordinary that the poison was not discovered in the spleen.—*Guy's Hospital Reports*, Oct., 1842.

ANCHYLOSIS.

An abstract of an interesting lecture by M. Malgaigne on recent anchylosis, resulting from various affections of the joints, or from prolonged absolute quietude of a limb, is published in the "*Gazette des Hôpitaux*" for December 20, 1842. M. Malgaigne directs especial attention to the professional dictum that these forms of anchylosis do not require any specific treatment, and that they will be removed in the course of time without medical assistance. This opinion he combats very strongly, as also the advice not to attempt passive motion of a limb as long as there continues any pain in the joint. He illustrates both his positions by cases, some of which serve to demonstrate that time alone cannot cure a commencing anchylosis, but tends the rather to increase the mischief, while the others show that the forcible flexion of a limb, even while some degree of pain in the joint continues, provided all the inflammatory symptoms have been dissipated, is far from being as injurious as has been represented, but, on the contrary, has led to a cure by the rupture of the anchylosis. This forcible movement is attended with considerable pain at the time, but its beneficial effects soon become evident. M. Malgaigne does not restrict the application of passive motion to a limb laboring under commencing anchylosis from inflammation of the joint, or from a too protracted state of rest of the part affected, consequent on fracture or luxation, but equally applies it to the same diseases when subsequent to white swelling, provided always that the increase of sensibility of the part has ceased. The persistence of the swelling is not with him a sufficient reason for not having recourse to forcible extension and flexion. The fol-

lowing case will show that even where there is a degree of deformity of the articulation sufficient to give rise to the fear that more or less erosion of the articulating surfaces has taken place, still something may be done for the unfortunate patient. A person was brought to M. Malgaigne, who had been obliged to keep his arm in a state of perfect rest for white swelling of the shoulder. All pain had then ceased, and he could perform some slight movements of the limb, but the deltoid muscle was completely paralysed, and half the head of the humerus had been destroyed, so that none of the movements of the limb were effected properly. Notwithstanding, by steady and well regulated passive motion, gradually increased in power and extent, the patient so far recovered the use of his limb that he can perform the most difficult gymnastic exercises.

ABSCESS IN THE UTERINE PARIETES, COMMUNICATING WITH THE RECTUM.

Dr. Frederic Bird attended a lady who enjoyed good health up to her thirty-seventh year, when she married. She was soon afterwards attacked with acute deep-seated pain in the hypogastric region, radiating to all parts of the pelvis, and increased by micturition and defecation. It was accompanied by the usual symptoms of inflammation of the uterus; Although the attack was relieved by the treatment adopted, it was not removed, and when an examination per vaginam was instituted, the uterus was found lower in the vagina than usual, with morbid enlargement more especially of the posterior paries, and the os and cervix uteri were painful to the touch and tumid. Between three and four months after the invasion of the malady, about half an ounce of pus suddenly escaped from the rectum, with immediate relief. Persistent diarrhoea with discharge of more or less purulent matter now set in, the patient observing that when the pus was not discharged as freely as usual the local pain was aggravated. All this while menstruation was very irregular, and attended with much pain in the loins and discharge of coagula. Profuse menorrhagia next set in, the uterine pain became exceedingly severe, attended with a relapse of the previous symptoms, to which was superadded a neuralgic condition of the genital organs, the slightest pressure upon which produced extreme suffering. The patient gradually sunk exhausted.

A post-mortem examination was made twenty-four hours after death. On laying open the abdomen, the omentum, small intestines, and all the pelvic viscera were found agglomerated together by peritoneal adhesions of old date. On raising the uterus it was seen to be firmly attached by its upper and posterior portion to the rectum; it presented an irregular form, having the fundus enlarged to about thrice its natural size. A longitudinal section showed the enlargement to have been produced by an abscess seated in the substance of the wall of the fundus uteri, the cavity of which contained about an ounce of dark thick pus; the walls of the abscess varied in thickness from one to three-fourths of an inch, the thinnest portion being nearest to the cavity of the uterus. A communication by means of a short sinus could be traced passing from the cavity of the abscess to the adhering portion of the rectum, and opening into that intestine by an aperture sufficiently large to admit of the passage of a

thick probe, and evidently of old formation. No communication existed between the uterine cavity and that of the abscess. The os and cervix uteri did not present any evidence of malignant disease. The Fallopian tubes and ovaries were adherent to the uterus, and could with difficulty be distinguished. The uterus had never been impregnated.—*Lancet*, Jan. 28, 1843.

DISLOCATION OF THE KNEE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—My attention was drawn a short time since to a case of complete dislocation at the knee-joint, reported in the "*London Medical Gazette*" for the 16th ult. by Mr. Adams, in which he says, "the only unequivocal case which he knows of as having been reported in this country, is the one related by Mr. Toogood in your Journal for June, 1842;" and upon reference to the Number in question, I find Mr. Toogood says, "Sir Astley Cooper had never met with a case of dislocation at the knee, nor has any surgeon of his acquaintance connected with the London or provincial hospitals, neither does he remember to have read of such a case. Now, Gentlemen, the object of this communication is merely to refer the two above-named gentlemen—viz, Mr. Adams and Mr. Toogood, to a case reported by me, and published in the "*Medical Gazette*" for May 14, 1836. Hoping you will be able to find room in a corner of your valuable Journal for this note,

I remain,

Your obedient Servant,

T. BRITAIN, Surgeon.

Chester, Jan. 20, 1843.

NOTE FROM MR. GARDNER.

Mr. Gardner begs to say that he never saw or heard of the paper in the "*Gazette Médicale*," referred to by the reviewer of his pamphlet; and he requests the editors of the "*Provincial Medical Gazette*" (?) to insert this statement.

49, Great Portland Street,
Jan. 28, 1843.

OBITUARY.

(From a Correspondent.)

It is with much regret that we have to record the lamented death of Mr. Baynham, of Birmingham, surgeon. The life of this greatly respected gentleman terminated on Saturday, January 28, after an illness of a few weeks' duration. In his death his family, the profession, and the public have sustained a severe loss. Mr. Baynham's mind, naturally acute, early made choice of the medical profession for its pursuit, and the zeal with which he commenced its studies continued unabatedly to animate him in practice. His unwearied diligence as a pathologist placed him

by the consent of his professional brethren in a high rank; his love of facts, which is synonymous with love of truth, stimulated him to industry as a collector of them, whilst it rendered him extremely cautious in deducing the legitimate conclusions. This rare and interesting peculiarity will perhaps account for the extreme reluctance he manifested to give the result of his observations to the public. He was induced, however, to publish two valuable papers, one appeared in the "*Midland Medical and Surgical Reporter*," November, 1831, vol. III, entitled "Cases of Aneurism"; and the other in the thirty-third volume of the "*Edinburgh Medical and Surgical Journal*," entitled "A Case of Retroverted Uterus, treated by puncture of that organ; with remarks on the circumstances which indicate the employment of that operation."

He had also prepared with great care and industry some statistical tables, which he thought might prove a useful contribution to medical science. The construction of these tables afforded agreeable occupation, to a mind of restless activity and great exactness, qualities as favorable to this laborious and usually onerous pursuit, as the offices he occupied in some of the most important medical institutions were calculated to supply the necessary data upon which they were formed. Nearly twenty-seven years he was efficiently connected with the Birmingham General Dispensary, and fifteen years he was one of the surgeons to the Town Infirmary, and the incumbent duties devolving on him he ever fulfilled with exemplary fidelity.

PROMOTIONS AND APPOINTMENTS.

NAVAL.

Surgeon—Edward Davis to the *Blazer*.

Assistant-surgeons—M. J. West to the *Lily*; John Jack to the *Thunderer*.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, January 27, 1843.

C. Hithington, H. J. Preston, T. H. Benfield, A. Cartwright, L. Byles, J. Prowse, S. Singleton, T. Young, J. R. Lewer, T. Spencer, D. Coulter, C. H. Perry.

TO CORRESPONDENTS.

A Medical Officer, Bradninch.—The poor-law commissioners have not issued any medical regulations since March, 1842.

The spirited letter of a barrister on phreno-mesmerism in our next.

We have not been able to find room for the report of the meeting of the *Ethnological Society* this week. The communication from *Harry Larke, Esq.*, Whitechurch, Salop, has been received. If the case be authentic we shall publish it; but both christian and surname sound curiously.

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CAVENDISH SQUARE, LONDON.

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PRACTICAL OBSERVATIONS ON DISEASES OF THE SKIN.

By THOMAS H. BURGESS, M.D., &c.

NO. IV.

ERUPTIONS OF THE FACE.

Lupus.

Lupus is one of the most formidable diseases to which the skin, not only of the face but of the entire body, is liable. The tendency it has to destroy the tissues in which it is developed, as well as the circumstance of so exposed a region as the face being in a manner its special seat, invest it with a peculiar degree of interest and importance. Besides, the fact of its being liable to be mistaken, even by the most careful practitioner, for another disease (syphilitic tubercle) possessing the same destructive character and occurring in the same part of the body, yet widely differing from it in its elementary nature, enhances its interest still further in a practical point of view. To enter as fully into the history of this disease as the importance of the subject requires would be to write an essay which would extend far beyond the limits usually allotted to each article in a weekly journal, and would not be consistent with the plan I am endeavouring to follow out—namely, to describe briefly and in a condensed form the most important features connected with the history and treatment of those diseases which occur most frequently on exposed surfaces of the body—to give an outline, as it were, of each eruption without any pretension to elaborate completeness. M. Bielt, it is well known, had made this disease and the syphilides his special study, and to that distinguished dermatologist, to M. Cazenave, and to the Hospital of St. Louis, am I indebted for most of my information on the subject under consideration as well as on cutaneous diseases generally.

Lupus occurs most frequently amongst children and adults; both sexes are liable to it, but it occurs oftener in females than in males, and we seldom see it attack individuals beyond the age of forty. It occurs more frequently in the country than in towns, and in children of a scrofulous habit; although, on the other hand, it is sometimes developed in persons of excellent health and in the vigor of youth. It attacks the nose more frequently than any other part of the body, then the cheeks, lips, and chin, and it usually begins with the development of a dull red, small, hard eminence or tubercle, which increases slowly and appears to occupy the superficial layer of the skin; sometimes several of these tubercles become united, and form a soft, indolent tumor, which finally terminates in ulceration. M. Bielt was in the habit of describing this affection according to the seat it occupied, and under the following heads:—Superficial lupus, deep-seated lupus, and lupus with hypertrophy—a method which

simplifies the descriptions of the disease considerably.

1. *Superficial Lupus.*—This variety sometimes appears to affect the superficial layers of the skin only. There are no tubercles or scabs present. The skin presents a reddish color, which is accompanied by epidermic exfoliation. It gradually becomes thin and smooth, and has the appearance of a cicatrix, which has supervened on a superficial burn. This variety occurs especially upon the face and jaws. In other cases small tubercles are developed in various points under the skin; after a certain length of time they ulcerate at the summit, and these ulcerations are covered with thick scabs, which extend gradually to the adjoining parts, leaving behind them white irregular cicatrices. The disease may thus spread over the entire face. It is kept up by the formation of new tubercles, which are circumscribed by a kind of hard tumefied rim; the process of ulceration is again set up, sometimes even in the recent cicatrices. The disease may attack both commissures of the lips, in the event of which the patient can with difficulty open his mouth, in consequence of the formation of thick adherent scabs on those parts. This variety of lupus may also attack the chest, limbs, and anterior part of the thighs. A case was treated by M. Cazenave at the Hospital of St. Louis, in which the disease attacked a young girl at the margin of the anus, the inner aspect of the groins, and was spreading towards the vulva when its progress was arrested.

2. *Deep-seated Lupus.*—The special seat of this variety is the nose. It is characterised by the appearance of a violet red color of the skin, with tumefaction of that tissue; by the formation of small scabs, which are removed and reproduced incessantly; and by the loss of substance. An exasperation of these symptoms speedily takes place. The scabs gradually thicken, and destructive ulceration ensues, which destroys both skin and cartilage. There is frequently a fetid discharge from the nose; in other instances there is neither coryza nor tumefaction present, merely a single tubercular elevation, red, smooth, and soft, which ulcerates in time.

The disease may thus destroy at the beginning a considerable portion of the nose. But it does not stop here; new tubercles are soon developed on the recent cicatrices, which in their turn quickly ulcerate. The process of destruction recommences, and frequently the whole of the nose disappears. The progress of lupus is not always the same; for example, in some instances the destructive process is scarcely perceptible, and after the lapse of several years a small portion of the nose only is removed, whereas in other cases the whole of this organ may be destroyed in the course of ten or fifteen days. In one case the disease will be confined exclusively to the nose, whilst in another it will extend to the face, and destroy the skin

and subcutaneous tissue in that region. Finally, this disease, almost always complicated with inflammation of the mucous membrane of the nose, will sometimes destroy the whole of the septum before it commences its ravages externally, and, on the other hand, commencing on the skin externally, the ulcerative process will proceed inwards, extend along the petuitary membrane, the floor of the nostrils, and become reflected on the palatine mucous surface, even as far as the gums, which are often deeply involved.

3. *Lupus with Hypertrophy.*—This variety of lupus usually commences with the formation of soft, indolent tubercles, pretty numerous, occupying a considerable extent of surface, as, for example, one half and sometimes the whole of the face. These tubercles do not ulcerate, but they enlarge gradually, and presently the skin and cellular tissue beneath are attacked by chronic indolent engorgement. The tumefaction increases, the face assumes a remarkably bloated appearance, and is studded over with small red spots, which are in point of fact true tubercular indurations in the incipient stage. Here and there small white lines are discernible. These are chiefly the cicatrices of old tubercles. These cicatrices are in this instance remarkable phenomena, as they are not preceded by ulceration or scabs. The only morbid alteration attendant upon the tubercular engorgement is a constant and insensible desquamation; and it would appear as if the different layers of the skin were involved, and are successively thrown off by this peculiar and imperceptible process of disorganisation. The distinguishing phenomenon of this variety—hypertrophy—sometimes attains a degree of intensity truly surprising; the cheeks, which had hitherto been thin and flaccid, become enormously enlarged and swollen, and retain for a short time the impression of the finger; they also bear considerable analogy to parts attacked by elephantiasis.

It is by no means uncommon to find the different varieties of lupus coexisting in the same patient, and this untoward event gives rise to the most serious consequences. One of the most formidable, and that which is always to be feared, is destruction of the lower eyelid by the development of the process of tubercular disorganisation already described. Besides the repulsive appearance it gives the countenance, there are other results of a much graver kind. Epiphora, for example, is inevitable. The eye itself is attacked by chronic inflammation, the conjunctiva is then thickened, the cornea becomes opaque, and total blindness is the final result. Another formidable symptom, which should be carefully watched and guarded against, is occlusion of the opening of the nares, resulting either from tumefaction or cicatrisation of the morbid parts.

Diagnosis.—As lupus is, perhaps, the only eruption that can with benefit be treated by caustic applications, a mistake in the diagnosis would lead to the most serious consequences. The diseases with which it is likely to be confounded are *syphilitic tubercle*, *acne rosacea*, *elephantiasis Græcorum*, and *noli me tangere*. The latter affection, by the way, differs in many respects from lupus, although some writers have described it as identical to that disease.

1. I have mentioned that lupus is especially liable to be confounded with a certain form of syphilis that

occurs on the nose and face. The following case, treated in M. Cazenave's wards at the Hospital of St. Louis, illustrates, in the clearest manner, the evil consequences that may be expected from an error of this kind:—The patient, D—, aged forty, was admitted under M. Cazenave on the 4th of January, 1841. In November, 1839, he discovered a number of red, indolent pimples, about the size of a pea, on his upper lip. His general health was excellent, and his constitution naturally robust. These pimples remained stationary for several months; the skin became painful, increased in size, and ulcerated at their apices, and the patient now, for the first time, thought of applying for medical relief. The upper lip was considerably swollen; the ulcerations had run into each other, and were covered with a broad thick scab. Besides, new tubercles were evolved on the alæ and tip of the nose, which advanced more rapidly than the former, and alarmed the patient considerably. An educated physician, who first attended the patient, believed it to be a case of lupus, and treated it accordingly. The scabs were first removed, and then it was discovered that the alæ of the nose were nearly destroyed. Caustics were immediately employed; in the first instance, the arsenical powder of Côme, and, at a later period, the acid nitrate of mercury. At the same time, arsenic was administered internally, the Asiatic pill being the preparation employed, and this treatment was continued for several months. After a great portion of the alæ and tip of the nose were destroyed, the disease was arrested, and the parts cicatrised. But the lip now became deeply involved, and the medical attendants, seeing that the disease was advancing in spite of all their efforts to check it, advised the patient to go to Paris, to the Hospital of St. Louis. When M. Cazenave first saw him, the upper lip was greatly swollen, and was covered in part by a thick scab, around which an erythematous patch was perceptible, presenting, on careful inspection, something peculiar in its color. A few lines beneath the inner angle of the left eye, two small tubercles, about the size of a pea, were also observed, which the patient said were exactly the same in appearance as those first developed on the lip and nose. They were of a violet red color, and were surrounded by a slightly *copper colored areola*. From the seat and form of the disease, M. Cazenave was led at first sight to believe it to be lupus. However, the peculiar color of the areola, and the aspect of the tubercles themselves, caused him to doubt this opinion on examining the parts more closely; and the patient, on being questioned as to his previous health, admitted that the disease was only of two years' standing—that he had syphilis with chancres in 1827, for which he had recourse to no treatment, and that since 1828 he was subject to an eruption of large pimples on the back, terminating in extensive ulceration. On inspection, the back was found furrowed here and there with these serpigenous ulcerations, which are invariably the result of *syphilitic* tubercles. Moreover, lupus commonly attacks young persons of a soft and lymphatic constitution, whereas this patient was forty years of age, and of a sanguineous temperament. These were considered sufficient proofs of the identity of the disease, wherefore it was treated as syphilis, with the proto-iodide of mercury, &c. From

the 6th of January to the 9th of February there was nothing remarkable observed in the general state of the patient, except a slight loss of flesh, but the local appearances were considerably altered. The tumefaction of the upper lip was completely removed; there was only one small ulceration remaining, less in size than a fourpenny-piece, and the tubercles near the angle of the eye had also disappeared. The treatment was now suspended for three weeks, and was then resumed, and in the course of fifteen days from its recommencement the patient was discharged cured. No topical remedies were applied during his residence in the Hospital of St. Louis. The foregoing case shows clearly enough the importance that attaches to the diagnosis of lupus, and the evil results of an error on that head.

2. Lupus may also be confounded with diseases not of syphilitic origin—with *acne rosacea*, for example. The circumscribed indurations which succeed to the pustules of the latter eruption may for a moment be mistaken for the nascent tubercles of lupus; but the red color of these indurations, the erythematous areola that surrounds them, the pre-existence of pustules, some of which are generally to be found on the affected parts, are characters quite sufficient to distinguish them from the livid, indolent tubercles of lupus, which are never preceded by any lesion or morbid appearance, if we except a slight violet coloured tint on the skin.

3. Where lupus is attended by hypertrophy, it appears that it is liable to be mistaken for *elephantiasis Græcorum*. But the latter disease possesses peculiar characters which will prevent any confusion of this kind. For example, the fawn colored hue of the skin^s the form or shape of the tubercles, which are large knotty, uneven, and separated by furrows in the skin, the nature of the ulcerations, which never destroy the tissues, and finally, the coexistence of the disease on other parts of the body—a circumstance which almost invariably occurs.

4. If the diagnosis is easily made in the two previous cases, it is, on the other hand, attended with considerable difficulty when it is necessary to distinguish it from *noli me tangere*. Although both these diseases possess the same destructive tendency, nevertheless they are different from each other in all other respects. For example, *noli me tangere* commonly attacks persons well advanced in life, while lupus, as we have already seen, is a disease of youth, generally speaking. The former is characterised by the evolution of a single tubercle, surrounded by a hard circumscribed base, and usually affected with deep, lancinating pain, whilst the tubercles of lupus are developed in the superficial layers of the skin, and are invariably indolent. Finally, *noli me tangere* is accompanied by tumefaction, sometimes to a very considerable extent, of the soft parts; and once ulceration has commenced, it destroys not only skin and cartilage, but also the bones in the vicinity of the diseased parts, which never occurs in lupus. Moreover, the cancerous ulcerations are everted, moist, and painful, and are not covered with the thick dry scabs which we find covering those of lupus.

Much difference of opinion still prevails with regard to the nature and origin of lupus. Some authors have described it as an irritable, unhealthy ulcer, situated

on the nose, gradually destroying its structure, and spreading to the cheeks, while others, with more correctness, say that when it occurs on the nose, it originates in unhealthy inflammation and ulceration of the cutaneous follicles of this part, but (as Mr. Plumbe pertinently remarks) have omitted to explain its occurrence where the follicular apparatus is deficient, or even absent altogether. Others, again, argue that it commences in the form of a tubercular growth, developed in the integuments of the nose. Mr. Plumbe, who considered *noli me tangere* and lupus to be the same disease, held one of these opinions. He considered lupus to originate commonly "in an unhealthy inflammation and ulceration of the cutaneous follicles on and about the nose, spreading to and involving the adjacent cellular structure, and that the tubercular formations, occurring at the same time on other parts of the body, are essentially different in their nature from these, their interior being made up of a solid organised structure." He arrived at these conclusions by reasoning on the analogy between the tubercular indurations of acne and the tubercles of lupus before the skin of the latter breaks. Most of the French dermatologists, as Alibert, Bielt, Rayer, and Cazenave, consider lupus to be of scrofulous origin in the great majority of cases; whereas other writers on cutaneous pathology do not even allude to that circumstance. It is but fair to state, however, that the French writers admit the disease sometimes occurs in persons of a robust habit of body, and in the enjoyment of excellent health. Mr. Benjamin Phillips, who has had the opportunity of treating and observing several cases of lupus at the Marylebone Infirmary, is also of opinion that it shows a predilection for scrofulous subjects. Plumbe, on the other hand, alleged that "the more common forms seen in England are the results of disorders which the habits of the individual have induced; that for one case in which a scrofulous diathesis is manifest, twenty others come under our notice where the patients are accustomed to indulgence in spirituous potations, and habitual violence to the digestive organs." I confess that I am not at all inclined to adopt this opinion. The "spirituous potations," &c., can only be regarded as determining and occasional causes of lupus, and not as the *fons et origo* of that sad complaint. The views of the French writers on this point appear to me to be much more correct.

Treatment.—Is lupus a local disease, or merely the outward manifestation of some morbid condition of the constitution? Many excellent writers on cutaneous pathology adhere to the latter opinion, and yet admit that constitutional treatment fails signally when employed without the aid of local remedies. How, then, are we to reconcile the curious pathological anomaly of a constitutional disease being only remediable by local measures? Constitutional remedies are perfectly useless when used alone in the treatment of lupus; and, on the other hand, the judicious employment of certain local applications is often attended by the most marked and decided benefit. This well-established fact no doubt tends to support the local origin of the disease, but other circumstances support an opposite view, and this important point must remain unsettled until pathological research throws further light on the subject.

In those cases where the patient is of a decidedly scrofulous habit, general remedies, appropriate to that condition, will be administered with benefit; and in all cases hygienic measures are necessary as adjuvants in the treatment of lupus.

The real treatment of this disease is, however, essentially local; it has for its object the resolution of the tubercles in the incipient stage, or at least before the process of ulceration is established, and in the event of this morbid condition having taken place, to produce cicatrisation of the ulcerated surfaces. In the first instance, when we wish to alter the vitality of the skin so as to produce resolution, ointments composed of the proto-ioduret, or of the deuto-ioduret of mercury, have been found most serviceable at the Hospital of St. Louis. These ointments should be rubbed gently over the tubercles occasionally, but the latter, being much more active than the former, ought not to be employed so freely. The formulæ used at the hospital mentioned order half to one grain of the proto-ioduret of mercury to the ounce of purified lard for the first, and for the second half a grain of the deuto-ioduret of mercury to the same quantity of lard. The ioduret of sulphur ointment has also been found serviceable for similar purposes and in like cases. M. Cazenave has recently employed an ointment composed of thirty grains of ioduret of ammonia to the ounce of lard with much benefit. The animal oil of Dippel and the vapor douche are sometimes beneficial.

In the event, however, of these remedies proving inefficacious—and it should not be forgotten that there are cases in which they would not be applicable—we must then have recourse to more active measures. The superiority of caustic local applications over all other remedies in the treatment of lupus is a practical fact now pretty fully established, and hence a variety of preparations of this nature have been recommended by different writers, the most important of which we shall now introduce to the notice of the reader. Those that have been found most beneficial at the Hospital of St. Louis are Dupuytren's powder, the acid nitrate of mercury, and the arsenical paste of Côme. The first, which is composed of proto-chloruret of mercury and arsenious acid in the proportion of one or two parts of arsenic to one hundred parts of the former, is used in very young patients. The second, made by dissolving one part of proto-nitrate of mercury in eight of nitric acid—a much stronger and more painful remedy—is employed when the disease is of some standing, and when occurring in adults. The parts are gently touched with the solution to the extent of a five-shilling piece. The third is also a painful and powerful remedy; a thin layer of the paste, not exceeding the circumference of a shilling, is applied to the parts. The application of this agent is followed by intense pain and the formation of thickish and very adherent scabs. It sometimes occasions erysipelas of the face, but this is rather a favorable occurrence than otherwise, as it may alter the vitality of the skin and the morbid action of the parts. During the process of cicatrisation, especial care should be taken to guard against occlusion of the different outlets and passages in the vicinity of the disease. Mr. Benjamin Phillips has found the chloride of antimony, the farriers' caustic, and the proto-nitrate of mercury, very successful at the Marylebone In-

firmary. The antimony is brushed over the surface with a camel-hair pencil every third day, and in order that the caustic may be applied directly to the diseased parts, Mr. Phillips recommends a poultice to be applied for two or three days previous to the employment of the escharotic.

The chloride of zinc has been much extolled, first by M. Canquoin, of Paris, and subsequently by Mr. A. Ure, as a curative agent in several malignant diseases. The reader will find an interesting memoir on this subject by Mr. Ure, in the "Medical Gazette" for 1836. The beneficial effects of this preparation in the treatment of lupus have been again brought under the notice of the profession by Dr. Byron, in an article entitled "Cases, with Observations on certain Malignant Diseases of the Skin and Subcutaneous Cellular Substance of the Head and Face," published in the "Dublin Medical Journal" for September, 1842. Dr. Byron relates several cases which were successfully treated by the application of a lotion containing one part of the chloride of zinc to four of water. The solution was used once a-day. Dr. B., however, did not confine himself to local remedies. He considers constitutional treatment to be of considerable importance with a view to effect a cure, and accordingly prescribed those general remedies which the particular condition of each patient seemed to indicate.

Mr. Donovan, of Dublin, has lately proposed a new remedy, which he calls the "liquor hydriodatis arsenici et hydrargyri," for the treatment of this and other diseases of a destructive character. It seems to be a most efficacious medicine in the treatment of lupus. Mr. Donovan has published a variety of cases of this disease furnished to him by different physicians, in which the employment of the above-mentioned preparation was attended by the happiest results. One drachm measure of the liquor of hydriodate of arsenic and mercury consists of water, one drachm; arsenious acid, one-eighth of a grain; peroxide of mercury, a quarter of a grain; and iodine, in the state of hydriodic acid, about three-quarters of a grain. The dose to begin with, for an adult, is fifteen drops, which may be increased gradually to forty drops. Some practitioners, however, are of opinion that all the curative effects of the medicine will be secured by doses not exceeding twenty minims. This preparation has also been used externally, in the form of lotion, with apparent benefit. Mr. Donovan's combination of arsenic, iodine, and mercury, is a most valuable therapeutic agent, not only in lupus, but in a variety of other cutaneous diseases, and is well worthy the attention of the profession. I consider this remedy, and the arsenical paste of Frère Côme, which I have seen attended with the best effects at the Hospital of St. Louis, to possess properties of the highest importance in the treatment of lupus.

29, Margaret-street, Cavendish-square,

February 4, 1843.

IODINE IN THE URINE.

M. Scharlan, having administered as much as seventy grains of the iodide of potassium in the twenty-four hours, found the whole of the salt in the patient's urine. The same, he affirms, occurs with respect to the bromate of sodium.

ON
DELIRIUM EBRIOSUM,
WITH
ACUTE CUTANEOUS PAIN SIMULATING
PLEURISY.

AND ON THE PROGNOSTIC SIGNIFICATION OF EPILEPTIFORM CONVULSIONS IN THAT DISEASE AND THE TRUE DELIRIUM TREMENS.

By MARTIN H. LYNCH, M.D.

The delirium ebriosum of Darwin—that is, an affection somewhat like delirium tremens, and produced by the abuse of spirituous liquors which have been freely drunk up to the supervention of the disease—is now very generally known to differ considerably from the true delirium tremens, although usually described as a variety of it. Well informed medical men are aware that delirium ebriosum, having many of the characteristics of delirium tremens, from the withdrawal of stimulus, presents, however, some symptoms peculiar to itself, and requires a slightly modified treatment. The following cases illustrate the usual symptoms and the appropriate treatment, whilst they exhibit some peculiarities at once curious and capable of furnishing some hints for practice:—

June 6, 1832. I was summoned to the assistance of Mr. —, aged twenty-nine, a student of medicine, and finding, on inquiry, that the symptoms were formidable and unusual, I procured the attendance of Professors Alison and Christison, who arrived at four, p.m.

The patient, a pale-faced young man, of low stature but robust figure, has been for years habitually intemperate, but during the week preceding the visits has surpassed all his former excesses, having spent the days and a great part of each night in drinking, and only enjoying a couple of hours uneasy sleep in brothels. Yesterday, continuing this dreadful course of vice, and able to walk without staggering, but much excited by drink, he (as we were informed) complained of headache, and his face was flushed. Shortly afterwards he fell down in a fit of epileptiform convulsions, which have recurred every two or three hours until the present time. During the greater part of the intervals between the fits he has been delirious, but pretty manageable.

The following are his present symptoms:—Headache; face flushed; carotid and temporal arteries pulsate violently; the conjunctivæ are injected; his bowels have not been freed since he has been carried home; the abdomen is full and tense; tongue white; pulse 102, full, and strong; he complains of a most excruciating pain of the right side of the thorax; the slightest pressure of the integuments against the ribs elicits exclamations of pain and makes him writhe; the skin covering the arm (from the acromion almost to the elbow) is painful on being touched or gently pressed between the fingers, but not to the same extent as the skin of the chest; the pain prevents the application of the stethoscope to the right side of the chest, and on the left nothing abnormal can be discovered; he can hardly be said to have a cough; when not roused he talks to himself incoherently, but when roused appears to recognise Dr. Alison and myself, and answers questions, although drowsily and stupidly. Shortly before the visit, one of the convul-

sive paroxysms occurred; his landlady says that he has not been “insensible” after the fits; she cannot say whether he has taken any medicine; and a fellow student and intimate friend, who was the companion of his revels, ashamed to appear before the professors, has concealed himself and cannot be found. He has not slept since he came home. To be bled to four ounces, and to have fifteen drops of Battley’s solution every four hours, and thirty drops at the usual hour of retiring to rest; head to be shaved, and cloths dipped in cold water to be kept constantly applied; a strong purgative enema to be immediately administered, and repeated until the bowels are well freed.

Seven, p.m. Bowels have been freed; pulse 100, softer; headache less; cutaneous pain continues; several convulsive paroxysms, like the epileptic, have occurred, and some have been witnessed of which the duration and intensity have been nearly the same as in epilepsy, but the stupor succeeding the paroxysm of the latter disease can hardly be said to exist. At the request of Dr. Alison, I have, since the last visit, made particular inquiries as to his ever having had epilepsy, and the result of my inquiries has corroborated the patient’s own denial. Cold to head to be continued; also Battley’s solution.

June 7, eleven, a.m. Has had some hours of sound sleep; the cutaneous pain has vanished; the skin is bathed in a warm and general perspiration; the convulsions and delirium have ceased; pulse 90; slight headache; thirst; urine scanty and high colored. Let him be purged freely by calomel and compound extract of colocynth. Mild febrile symptoms, the treatment of which need not be detailed, continued present until the 13th of June, when he became perfectly convalescent, and returned home a few days afterwards.

The following case, reported by Carter (“American Journal of Medical Sciences,” vol. VI.), bears a striking analogy to that which I have related, although it did not yield so readily to treatment.

Robert Peacock, aged thirty-five, had *mania a potu* once; has been drinking very hard for the last month, and slept out nearly every night; admitted May the 6th. The symptoms, on admission, were those of acute pleuritis, connected with epileptic convulsions (for the first time in his life), which were relieved by cupping, blistering, purging, shaving the head, and constant application of cold water, with the occasional use of the following:—

Assafœtida milk, six ounces;

Tincture of acetate of opium, two drachms;

but sleep not succeeding on the third day, mania a potu became developed.

9. Is very wild; constantly imagines that there is a rattlesnake running across the room, and persons with guns endeavouring to shoot it; occasionally jumping up and getting into the corner, in order, he says, to avoid the shot which are fired at the snake. Head feels heavy; skin rather dry; pupils contracted; complains of pain about the umbilicus; pulse is full, with some force, 80 per minute. Ordered cups to the seat of pain and to the temples; four grains of opium every two hours.

Afternoon: Is still very wild; face greatly flushed, covered with profuse perspiration; has only taken four

grains of opium. Ordered cups to the head to be repeated and opium continued.

10. Took only four grains, went to sleep very shortly after: the cups were applied and he slept nearly all night, and on waking was more quiet and rational; bowels not open for two days past. Ordered ten grains of calomel and one grain of opium and a large bottle of porter; ten drops of the acetated tincture of opium in each glass.

Evening: Bowels not open; complains of slight pain in the head; other symptoms the same. Ordered cups again to the head, injection of senna and salts, and twenty drops of the *acetum opii* every hour.

11. Took 100 drops of the *acetum opii*; slept about four hours; bowels opened three times; complains of nausea and pain in the epigastric region. Ordered cups to it and the following:—

Calomel, four grains;

Opium, two grains, every second hour.

Evening: Has taken twelve grains of calomel; bowels once opened; head excited; pulse has rather more force. Omit powders and apply cups to the head.

12. Slept some last night; head is still a little flighty; says he saw twenty persons last night, and is now occasionally talking to persons whom he imagines present, although, when spoken to, he answers very correctly; other symptoms are diminished. Ordered cups to the head.

13. Slept some towards morning; still flighty; head hot, with some uneasiness. Cups to the head.

14. Is now asleep, and slept nearly all last night.

15. Slept to day and yesterday; says he never felt better. Soon afterwards he was discharged cured.

Leviellè relates the case of a man who had drank hard for some time. After a Bacchanalian excess he had an epileptiform attack; he was leeches, and delirium tremens came on. He recovered in a few days under the ordinary treatment.—*Med. Chir. Rev.*, Aug., 1828.

REMARKS.

Epileptiform convulsions are by no means uncommon in the true delirium tremens—that which follows the withdrawal of the stimulus—but in this disease (if we are to judge from facts accurately recorded, and not from simple assertions) the epileptiform convulsions occur only towards the close of fatal attacks, and are justly considered by most practitioners as the harbingers of death. The value thus attached to convulsions of an epileptic character in delirium tremens might lead to some serious errors in practice. A young practitioner, aware that patients affected with the true delirium tremens often die in epileptic convulsions, and having never seen histories of cases like these we have related, might, if charged with the treatment of such, give a decidedly unfavorable prognosis, and hence the relatives might forbid all further treatment, on the grounds of not troubling the patient with useless remedies—a kind of interference not unusual after a decidedly fatal prognosis.

It is a curious circumstance that the only cases we can discover of recovery after epileptiform convulsions are these alluded to in this article; and that of these, one (that related by myself) is an unequivocal instance of delirium ebriosum.

The case related by Carter presented, for the first

three days, a state of the system very similar to that which occurred in the instance of the Edinburgh student. Carter gives his case at considerable length, but certainly without much clearness or precision. Nevertheless, as it is asserted that Peacock had been drinking hard for the previous month, and no mention is made of his having ceased to drink, it may fairly be concluded that the occurrence of symptoms of acute pleuritis, connected with epileptic convulsions was not preceded by any abstinence from the accustomed stimulus. It is my belief that there was no pleurisy whatever, and that the notion of its existence arose from a cutaneous pain similar to that noticed in the case observed by myself.

My view is confirmed by the report; for had the disease been acute pleurisy, symptoms must have arisen that could not escape mention by a physician relating the case at such length as Carter.

If my opinions be correct, severe cutaneous pain with epileptiform convulsions, and a state of the circulation and system at large very like that exhibited in the case treated in Edinburgh existed for the first few days in the case of Peacock, and probably sleep would have been enjoyed and recovery established on or before the third day, had not blistering been resorted to and *steady* treatment by the acetated tincture of opium been omitted. 'Tis true the tincture was prescribed, but the mixture contained but twenty drops per ounce and was only "occasionally administered," which may, perhaps, signify two or three times in twenty-four hours.

All authors agree that pain is an extremely rare occurrence in delirium tremens; and that when patients affected with pleurisies or other painful diseases are attacked by delirium tremens the pain disappears to return again, when the mania a potu has disappeared. The recollection of this circumstance may assist the practitioner in distinguishing the real nature of such pain as that observed in the two first cases.

In the Edinburgh case the quantity of the tincture administered was by no means great; at half past four, fifteen drops; at half past seven, fifteen drops; at half past ten, fifteen drops; and at a quarter before one, thirty drops; altogether seventy-five drops; but its sedative effects were assisted by (as we conceive) the tranquillising operation of purgatives, and not counteracted by the irritation of blistering. In my opinion, however, such cases will generally require fuller doses.

In Carter's case some errors, it appears to me, were committed in the treatment after true delirium tremens supervened on the state nearly resembling the delirium ebriosum. Even when the patient is affected with decidedly asthenic delirium tremens, it is better to give the salts of morphia along with a very moderate portion of the accustomed stimulus than to give crude opium as Carter did at first. Again, the administration of purgatives was improperly omitted during the first few days of the delirium tremens. Many, agreeing with Coates, imagine that the bowels cannot be moved during the free administration of opiates; it is difficult to move them, but by no means impossible; and Blake, very properly, lays great stress on the exhibition of purgatives, even croton oil, in cases where such a step is not forbidden by the previous existence of dysentery or some such disease.

One venesection to the extent of fourteen or sixteen ounces practised at the commencement would have been preferable to the repeated draining by cupping. Peacock was cupped ten times, and four ounces may be taken (on the average) as the quantity drawn on each occasion, making altogether (independent of trickling) forty ounces, a quantity which I cannot consider as called for by the symptoms. Indeed, Carter himself shows that the pulse had been reduced to a feebler state than desirable, employing (on the 11th) the words, "the pulse has rather more force."

According to Coates, convulsions are rare. Carter says, that convulsions, distinct from those preceding death in the true delirium tremens, are infrequent, occurring about twelve times in one hundred cases, and he does not tell us whether they are a fatal symptom or not, neither whether they occur solely in the delirium ebriosum alone, or in the true delirium tremens also. I hope these points may be determined by the experience of those who may chance to see this paper.

From the cases related in it, I conclude a strong presumption is raised that epileptiform convulsions are not a fatal symptom when they occur in the delirium ebriosum, and are accompanied by a pulse, moderate in strength, and not exceeding 104 in frequency. Indeed, Blake says that the most favorable circumstances in the true delirium tremens are—1st, the disease not having occurred previously; 2ndly, the pulse being of good strength and not beating more than 100.

7, Delahay-street, Westminster,
Feb. 6, 1843.

ON THE PREVENTION OF PHOSPHATIC DEPOSITION IN THE ANIMAL ECONOMY.

By ALEXANDER URE, Esq.

Every medical man familiar with the treatment of urinary disorder must confess, that among the most puzzling cases he encounters are those characterised by a deposition of the earthy phosphates; and that while it is an easy matter to render acid urine alkaline, it is by no means so easy to render alkaline urine acid.

M. Rayer, in his recent elaborate work on Diseases of the Kidney, has given, under the head of "Néphrite Simple Chronique" (tom. I., p. 372), the reports of eight cases of individuals, in whom the urine was alkaline and depositing phosphates. Out of these eight we find no less than five in which the remedial means resorted to effected no change in the qualities of the urine; in one, great improvement ensued; two only were cured, each of whom was under thirty years of age.

In a paper of mine, published in vol. XXIV. of the "Medico-Chirurgical Transactions," it was stated that when benzoic acid or a benzoic salt is administered internally, hippuric acid is formed, and may be discovered in the urine. It was, moreover, suggested that the therapeutic application of the above fact might prove beneficial in the treatment of certain forms of gravel and in disordered conditions of the renal secretion connected with a gouty habit. Some interesting

particulars, in corroboration of these views, have been since recorded by Dr. Walker, of Huddersfield,* and by Mr. Soden of Bath.† These gentlemen, however, exhibited the benzoic acid in union with balsam of copaiba. The following case, which has been attentively watched along with me by my intelligent friend, Mr. Farquhar, of Albemarle-street, will, it is hoped, serve to illustrate the pure *dynamic* effects of the remedy in a clear manner:—

H. H., aged thirty-seven, of spare make and sedentary habits, consulted me on the 9th of May, 1842, relative to a disorder of the urinary secretion. He said that about ten months previously he noticed, for the first time, a whitish deposit in his water, which, ere long, concreted on the chamber-pot, forming a hard grey crust, most difficult to remove; the urine had a very offensive odor, and varied occasionally in appearance, presenting sometimes a greenish, at other times a brownish color; at the above date it was slightly opaque and of a pale yellow hue, emitting a pungent ammoniacal smell, alkaline to litmus, and effervescing briskly upon the addition of a few drops of hydrochloric acid; almost as soon as discharged it threw down a white flocculent sediment, consisting of phosphate and carbonate of lime; it did not afford any uric acid; its specific gravity was 1.023; it was voided without pain or difficulty, and in a full stream; there was little or no increase of the mucous secretion, and no albumen. The patient's appetite was good, his tongue clean, and he slept well; but he was pale, complaining of general lassitude and languor, and of a sense of weakness across the loins; his bowels were generally confined.

1000 grain measures of the above urine, evaporated to dryness by a water bath at a temperature not exceeding 160° Fah., left only thirty-six grains of dry extract, and exhaled, during the process, a great quantity of ammonia, as proved by a slip of moist red litmus paper held over the dish becoming instantaneously blue.

He was directed to take an aperient dose of rhubarb and ten grains of benzoic acid, twice in the day, and to live well, but plainly.

May 12. Has taken the medicine without suffering the slightest inconvenience. He says that the urine, within a few hours after the first dose, became clear, and ceased to deposit any chalky sediment. It is now natural in all respects; acid to litmus; specific gravity 1.022.

After six days longer he discontinued the use of the benzoic acid. Towards the end of the month the urine became again alkaline, and I was induced to try him with the usual routine of medicines recommended in cases of this description, in order to see whether the urine could be brought to a permanently normal state. He was accordingly directed to take nitric acid in full doses thrice a-day, and an opiate at night. These, after a sufficient trial, produced no change. Hydrochloric acid, sulphuric acid combined with sulphate of iron, bark, tartaric acid in conjunction with sal-ammoniac, were each in turn freely administered, but to no purpose, for the urine continued alkaline and loaded with white sabulous matter. He

* Provincial Medical Journal, Feb. 1842.

† Ibid, Aug., 1842.

eventually resumed taking the benzoic acid, and with immediate good effect. Professor Mitscherlich, of Berlin, visited London in October last, when I had the advantage of this distinguished chemist's inspecting the above patient's urine along with me, and verifying the remarkable change produced.

Dec. 1. The patient again applied to me on account of a return of the turbid alkaline urine. I found its specific gravity 1.024. Two ounces evaporated *in vacuo*, left twenty-eight grains of extract, consisting of animal matter, salts, with but little urea. Ordered to recommence the benzoic acid.

4. Urine is now natural; remaining limpid and acidulous after standing for twenty-four hours. The acid stain is permanent on litmus paper. Its specific gravity is 1.020. Two ounces yielded by evaporation forty-nine grains of extract.

Thus, after the administration of the benzoic acid, the urine, although of an inferior density, afforded nearly double the amount of solid residuum that it did previously.

11. A slight sediment has made its appearance in the urine, which proves upon microscopic examination to be crystals of ammoniaco-magnesian phosphate, unaccompanied by the amorphous phosphate or carbonate of lime. To suspend the use of the benzoic acid, and to take twenty minims of hydrochloric acid diluted with water thrice a-day.

25. Urine turbid, alkaline, effervescing briskly with nitric acid, notwithstanding he has been taking hydrochloric acid regularly during the last fortnight. The sediment consists chiefly of phosphate and carbonate of lime, and is deposited only from the urine secreted during the course of the night. To take eight grains of benzoic acid at bed-time and to discontinue the hydrochloric acid.

30. Urine transparent and acid, remaining so after the lapse of many hours. Specific gravity 1.018. It contains the natural proportion of phosphates and uric acid. On account of some uneasiness in the loins he was ordered to rub in the tartar emetic ointment.

January 12, 1843. The uneasiness formerly complained of is removed. He has ceased to take any benzoic acid for five days past. The urine is somewhat cloudy. At the suggestion of Dr. Prout I was led to prescribe for him the solution of acetate of ammonia in half ounce doses.

20. Urine still cloudy, notwithstanding the use of the spirit of Mindererus. In consequence of his suffering from some irritation within the chest, he was desired to employ the same counter-irritant salve, to take small doses of tartar emetic in solution thrice daily, and a dose of benzoic acid every night.

22. Feels much better in all respects; the pulmonary oppression is gone; urine is natural, and continues limpid and acid after several days repose.

It may be observed, in conclusion, that his general health and appearance are materially improved, and he is now enabled to check all tendency to calcareous urinary sediment by simply swallowing a few grains of benzoic acid at bed-time.

REMARKS.

It has appeared to me expedient to give the above case at some length, as it offers several highly instructive points for consideration. The subject is a man in the prime of life, stricken with slow consuming

disease; complaining of languor, lassitude, and progressively losing flesh and strength. His urine (and the urine generally) furnishes a good criterion of unhealthy action in the system; is alkaline, throwing down a white starch-like sediment. It is deficient in uric acid, while the greater portion of the urea is resolved into carbonate of ammonia. No other substance except the benzoic acid seemed capable of controlling the septic influence which led to these changes. Other vegetable acids were not tried, as they uniformly disorder the stomach, and mineral acids failed. The latter, indeed, according to Sir B. Brodie's experience, are much less influential in cases like the present, where the phosphate is deposited by the urine in the form of an impalpable powder, with little or no increase of the mucous secretion than in those in which the urine contains the triple phosphate.*

Benzoic acid, therefore, enables us to solve the hitherto embarrassing problem of rendering an alkaline urine acid at pleasure, and consequently of obviating the irritation which such urine occasions in the membranous surface with which it comes in contact; a species of irritation which opium is not unfrequently employed to allay.

The transition to the ammoniaco-magnesian phosphate is noted upon the 11th of December, 1842. This may be ascribed to some faulty assimilation in the first passages, as it yielded readily to the exhibition of another acid—namely, the hydrochloric, which did not affect the former deposit. Thus a reflex light, so to speak, is often thrown upon the phenomena of disease, from carefully studying the action of remedies. I may here point attention to the fact, that I have observed a copious formation of crystals of the above triple phosphate in urine after a repast of *sour-kraut*; a circumstance, by the way, which may perhaps account for the great immunity of the Germans, who partake freely of that food, from uric acid calculus.

Not only benzoic, but likewise cinnamic acid, is transformed by passing through the system into hippuric acid, as was established by me last spring.† To detect the free hippuric acid after the administration of one or other of these acids, it is merely requisite to inspissate a portion of urine by means of a steam-bath, to boil the resulting extract with alcohol *in vacuo*, and allow a little of the clear supernatant liquid to evaporate spontaneously upon a slip of glass. In the course of some hours, characteristic crystals of hippuric acid—namely, quadrangular prisms with dihedral summits may be distinguished with the microscope. This agrees with the recent researches of Pelouze, who has shown that urea may be present along with lactic acid or hippuric acid, without entering into chemical combination with either of them;‡ thus demonstrating the fallacy of all the theories based upon the supposition of the existence of lactate or hippurate of urea.

In order to ascertain the solvent power of urine containing hippuric acid upon phosphate of lime, the following experiments were instituted:—A quantity

* Lectures on Diseases of the Urinary Organs, p. 220.

† Pharmaceutical Journal and Transactions, June, 1842.

‡ Annales de Chimie. September, 1842, p. 65.

of subphosphate of lime was separated from fresh filtered urine by means of pure caustic ammonia in a glass vessel excluded from access of air. The precipitate was well washed with distilled water and dried. A subphosphate was in this way procured, identical with that which forms the various deposits and concretions in the human body. A certain measure of the said urine, having a specific gravity of 1.025, was allowed to digest at a blood-heat along with a given weight of the above subphosphate. After three quarters of an hour had elapsed it was saturated with caustic ammonia, and thereby yielded more than double the amount of subphosphate of lime, which natural urine of the same specific gravity contains, according to the observations of Cruickshank.

Both the prepared subphosphate and the carbonate of lime are promptly taken up by a warm aqueous solution of hippuric acid; which may thus, independently of its antiseptic agency, serve to hold dissolved any excess of these inorganic matters. Human urinary calculi occasionally consist of one or both of them. Frommherz (Jahrb. der Chemie u. Phys. XVI., 329) has given the details of the analysis of a stone from the human bladder, composed of 90.673 per cent. of carbonate of lime, 2.966 of phosphate of lime, 4.015 of albumen and coloring matter; the nucleus being a particle of quartz. Bergemann (Poggend. Annalen XIX., 558) examined a human urinary calculus, of which the main constituent was carbonate of lime. Winkler (Geiger's Mag. XXI., 253), on the other hand, met with a calculus containing no less than 87.627 of phosphate of lime. A prostatic concretion examined by M. Barruel (Journ. de Chimie Med. VI., 12), was composed of 80 per cent. of phosphate and carbonate of lime, and 20 per cent. of a substance perfectly resembling coagulated albumen. Indeed I am disposed to believe with Dr. Yelloly, that phosphate of lime is seldom found in animal concretions uncombined with carbonate of lime (Phil. Trans., 1829, p. 79).

Phosphatic depositions are frequently observed in conjunction with gouty affections. Hippocrates says, that a *λευκή υρνη* which forms a whitish sediment, *παχυ δε υρην λευκήν υποστάνειν εχον*, oft betrays pains in the joints (Prædict. lib. II., Cap. 10, n. 7). A remarkable case is collated by Haller (Disp. Pract. tom. VIII., p. 795), "De materiâ calcareâ post diuturnam arthritidem per vesicam urinariam eductâ." "I know a gouty subject," says Naumann (Handbuck der Med. Klin. tom. VI., 398), "who suffers from chronic catarrh of the bladder. From time to time the urine becomes milky, and throws down a quantity of muco-aluminous matter mixed with phosphate of lime." M. Civiale, a deservedly high authority in questions of this kind, remarks (Du Traitement Médical et Preservatif de la Pierre, p. 65), "chez les personnes atteintes depuis longtemps de la goutte et déjà épuisées par les souffrances, la gravelle qui survient ou qui continue est plus spécialement phosphatique." "I know one person (Otto by South, p. 103) in whom, during an atonic attack of gout, the whole mouth, throat, and gullet were largely covered with a whitish mucus, which, when dried on blotting paper, left behind a large quantity of phosphate of lime." Tiedemann found white, stone-like, roundish concretions, principally consisting of phosphate of lime, in

most of the muscles, especially in those of the extremities of a gouty subject (Op. cit., p. 252). It is, moreover, well ascertained that the calcareous incrustations which are met with between the serous and fibrous coats of arteries are frequent in the gouty, and in many instances taphaceous concretions contain no urate of soda but phosphate of lime (John, in Meckel's Archiv. für die Physiologie, vol. I., part 4, p. 513).*

Hence it appears probable, that in many such cases the calcareous deposition is to be referred to a debilitating and septic influence acting upon the system at large. To counteract which it behoves the medical practitioner to advise such hygienic and therapeutic means as will maintain that equilibrium of function which constitutes health. A strong argument in favor of the antiseptic power of benzoic acid, or rather of hippuric acid, is deduced from the fact that the urinary secretion, a secretion above all others prone to rapid spontaneous putrefaction, remains untainted for days, and sometimes even weeks, when this acid is one of its component parts.

13, Charlotte-street, Bedford-square,
January 31, 1843.

WOUND OF THE ABDOMEN, WITH PROTRUSION OF THE INTESTINE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you think the following case worthy of publication, I shall feel obliged by your inserting it in your Journal.

I remain, Gentlemen,
Your obedient servant,
J. C. JERRARD.

Honiton, February 4, 1843.

Caroline Jummerhays, aged eleven years, received a wound from the point of a scythe in June last. The child was running at play, and fell as she passed a

* Albumen is more or less intimately connected with most of these deposits. It has a great affinity for the phosphate of lime in the degree of saturation which characterises the phosphate as bone-earth; and combines with it in variable proportions, forming compounds insoluble in water. Some chemists have found from 8 to 9 per cent. of phosphate in the albumen of the serum of blood (Berzelius, Traité de Chimie, tom. III., p. 516, Bruxelles, 1839). In order to determine the action of hippuric acid upon an insoluble compound of this nature, the following line of investigation was adopted:—To a portion of the filtered white of egg diffused through water, a few drops of caustic ammonia, and then a little phosphate of ammonia were added; into the mixture a small quantity of a solution of chloride of calcium was slowly dropped, as recommended by Berzelius. The resulting precipitate being well washed and dried at a low temperature, appeared as a semitransparent, horny-looking substance, composed of 52 per cent. of bone-earth and 48 of albumen. A small quantity of this being treated with boiling distilled water, formed a kind of coagulum, and upon testing the water afterwards for lime, not a trace could be detected. On adding, however, a little hippuric acid to the water, and allowing it to digest at a moderate warmth along with the albuminous compound, the coagulum ere long broke down, a portion of the albumen seemed to dissolve, as did the phosphate of lime, for a copious white cloud ensued upon the addition to the filtered liquor of a solution of oxalate of ammonia. The presence of phosphoric acid was proved by nitrate of silver.

mower at work, the point of the scythe penetrating the left side of the abdomen, about three inches below, and the same distance from the umbilicus. I saw her about three hours after the accident occurred, when there was a heap of protruded knuckles of intestine about the size of a large fist. There was severe retching and a feeble pulse.

Having relaxed the lower limbs and raised the pelvis, I endeavoured, with both hands, to enclose and compress the heap of intestine, but could not reduce an inch of it, and during the attempt I could perceive fresh portions of the bowel protrude every time she retched.

I then tried to find the wound, which was so completely hid by the overspreading of the heap of intestine, that I could not see any portion of it. I next took hold of a portion of the bowel between the forefinger and thumb of both hands alternately until I traced it (whether its upper or lower part I cannot tell) to the wound; then, with the point of each forefinger alternately, I was enabled to return portion after portion, and in about half an hour succeeded, without enlarging the wound, in reducing the whole mass.

The wound, which was about three-fourths of an inch in length, was united by two sutures (which were passed through the cutis only), a strip of adhesive plaster, a compress of lint, and a bandage round the body.

A dose of castor oil was given, which operated well in the night. The next morning there was considerable tenderness diffused over the abdomen. She was bled to sixteen ounces. In the evening of the same day, the tenderness continuing, she was again bled to the same amount.

After this the case went on well. The ligatures were stripped and removed about the tenth day. A strip of adhesive plaster, a slight compress of lint, and the circular bandage, were continued about ten days longer, when the wound was completely cicatrised.

REMARKS.

I do not think that, without enlarging of the wound, I could have succeeded in returning the intestine within the abdomen by any other method than that which I adopted. Every attempt to compress the mass seemed to excite the retching, and further protrusion, as stated above, could be distinctly perceived at each effort to vomit.

The retching recurred repeatedly during the reduction with the points of the forefingers, but the protrusion could be effectually prevented by the points of the fingers in the wound.

REMARKS

ON

ABNORMAL SOUNDS IN THE EAR.

By G. KRAMER, M.D., Berlin.

The occurrence of accidental or abnormal sounds or noises in the ear has been accounted for in three ways. 1, It is said that the sound is caused in the interior of the the organ of hearing; 2, That it arises from condensation of air in the cavity of the tympanum; and 3, It depends on tension of the membrana tympani.

num; and 3, It depends on tension of the membrana tympani.

Although experience has never demonstrated the existence of aneurismal dilatation of the small vessels of the internal ear, and although the small calibre of the vessels must render such an accident very improbable, yet Itard seems disposed to admit it in certain cases giving rise to the development of certain sounds in the interior of the ear. This, however, is a mere hypothesis. The pulsations of which some plethoric individuals complain, have likewise been explained by distention of the arteries of the ear; but it is much more probable that sounds of this kind are produced in the sinuous canals through which the blood-vessels pass to the brain, and that they are rather felt in the head than heard in the ear. The same remark is applicable to the sounds which attend aneurism of the primary carotid and arch of the aorta, or hypertrophy of the heart.

As to condensation of air in the cavity of the tympanum, it is impossible to conceive how such an effect could be produced. Previous obliteration of the Eustachian tube must coincide with such an accident; but then the retained air would be dilated by the natural heat of the body, instead of being condensed. Now, dilatation of the air in the cavity of the tympanum is not a cause of "singing" in the ear, for this symptom is as often absent as present in cases of obliteration of the Eustachian tube.

The third alleged cause is likewise inadmissible. The membrana tympani is always in a state of tension, in healthy persons free from the noises alluded to; it is of a shining hue, and very convex outwards; I have never seen this membrane more tense than it should be in several hundreds of patients whom I have examined with the greatest care, and I am unacquainted with any symptom indicative of this pretended excess of tension. The only alterations which it presents are changes of texture; we find the membrana tympani thickened, inflamed, destroyed in part or in whole, opaque, rough, covered with vegetations, &c., without being able to trace any connection between these organic lesions and the production of abnormal sounds in the ear.

It has been affirmed that all obscurity in the diagnosis of increased excitability of the auditory nerve, as a cause of abnormal sound, ceases as soon as the symptom becomes connected with deafness. By deafness we are here to understand diminution and not a complete loss of the power of hearing; for mention is made of deafness which has suddenly ceased on the disappearance of the sounds, while the sudden disappearance of true deafness is a thing absolutely impossible. But deafness (or rather hardness of hearing), accompanied by irregular noises in the ear, is not dependent on some affection of the auditory nerve alone. It is accompanied by various diseases of the auditory apparatus, and this so often, that we cannot admit from the coexistence of deafness with abnormal sounds that the latter depend on increased sensibility of the auditory nerve.

To prove this assertion I have taken from my notebook one thousand cases of diseases of the ear, and I have classed them in two series, according as they were or were not accompanied by accidental sounds; the species of disease was noted in each case after

careful examination. The following are the results obtained:—

	With sounds.	Without sounds.
Erysipelatous inflammation of the meatus and obstruction by cerumen	72	22
Inflammation of the glandular apparatus of meatus . . .	11	10
Inflammation of its cellular tissue	8	0
Inflammation of its periosteum	1	3
Acute inflammation of membrana tympani	3	1
Chronic inflammation of membrana tympani	95	81
Congestion of Eustachian tube	40	44
Contraction of Eustachian tube	11	8
Obliteration of Eustachian tube	2	0
Inflammation of cellular tissue of cavity of tympanum . .	2	1
	245	170
Increased sensibility of auditory nerve	462	123
	707	293

1000

In all these cases the power of hearing was more or less diminished. In 707 of them the deafness was accompanied by abnormal sounds; and we should, therefore (if the doctrine alluded to be true), admit increased excitability of the auditory nerve; but this was absent in 245 of the 707 cases. The coexistence of deafness and "singing" in the ears is not, therefore, a certain sign of exalted excitability of the acoustic nerve, since it does not occur in 245 out of 707 cases; while of 585 cases, in which this increased excitability did exist, 123 were unattended with any trace of abnormal sounds in the ear. The mistake of writers on this subject depends on their explanation of abnormal sounds considered as a symptom of disease.

From the numerous observations which I have made, it appears to me that the duration and interruption of these sounds, their intensity, weakness, and infinite degrees of diversity are in no way connected with any particular affection of the auditory apparatus. The same individual may labor under the same form of disease in both ears, yet he shall hear the sounds on one side and be free from them on the other. Hence we must conclude that the cause of these sounds remains enveloped in the greatest obscurity, and that we cannot attach to them the slightest importance in the diagnosis of the diseases of the ear. Some writers tell us that when the affection is confined to a single ear it announces some lesion of the peripheral extremity of the nerve; but that when both ears are attacked, and especially if some trouble of vision coexist, we may conclude that the central extremity of the nerve is implicated.

I can affirm that the occurrence of accidental sounds in the ear on one side as well as on both is observed in various diseases of the auditory apparatus, without any sign that the auditory nerve has suffered, either in its peripheral or central part. On the other hand, increased excitability of the auditory nerve almost

always attacks both sides at the same time (or at least very nearly so), and gives rise to a remarkable change in the moral faculties, to depression of spirits, nervous headache, disinclination to study, and disturbance of the sleep, without any proof that the central part of the auditory nerve is affected. That such is the case is proved by the immediate benefit obtained in this form of disease by use of gentle excitants, directed, in the form of vapor, towards the peripheral extremity of the nerve, through the Eustachian tube, the cavity of the tympanum, and the fenestra ovalis.

As to coincidence of this state with disordered vision, I am convinced that the latter depends on some change near the origin or trajet of the optic nerves, which has no connection with any analogous change in corresponding portions of the auditory nerve.

It has been said that deafness connected with accidental sounds in the ear presents the following peculiarity:—Compression of the carotid arteries dissipates the false sounds and the deafness with them. I have never seen any example of this kind, nor is the assertion supported by a single case. Itard, indeed, cites one case, but it is far from conclusive. On compressing the carotids he succeeded in almost entirely removing the abnormal sounds; but he does not tell us that the accompanying deafness was *almost entirely* removed with them.

In the treatment of this affection local and general blood-letting is commonly employed, from the idea that it is connected with congestion; but we cannot admit the propriety of this mode of treatment if we reflect on the variety of diseases with which the existence of abnormal sounds in the ear is connected. In cases of nervous deafness blood-letting would be certainly injurious; it would have a very doubtful effect on the sounds, and would inevitably increase the deafness.—*Ann. de la Chir. Francaise*, Jan. 1843.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, FEBRUARY 11, 1843.

On Tuesday last Mr. French obtained leave from the House of Commons to introduce a bill for the better regulation of the medical charities in Ireland. We have some misgivings about the policy of any one, not connected with the Government, introducing any measure relative to Irish medical charities, so soon after what we must call the defeat of the Government on that question. Mr. French, however, represents the opinions of a large body of the profession in Ireland, and as Irish medical men may be allowed to know what is best suited to their own interests, we shall not venture to dissent from them.

That the medical charities of Ireland required to be placed under some efficient control was abundantly demonstrated by the statements of the hon. member. The number of establishments in Ireland dedicated at present to the gratuitous relief of the sick poor is 774. They consist of 9 hospitals in Dublin, supported by Parliamentary grants; 11 lunatic asylums, 41 in-

firmaries, 88 fever hospitals, and 626 dispensaries. The total annual expenditure for these various establishments is £223,165 10s. Of this sum £44,772 are furnished by private subscription; the remainder (£178,393 10s.) is obtained from Parliamentary grants and county rates.

The total number of internal patients admitted during the year is about 75,000; the number of poor people relieved from the dispensaries is about 1,200,000 annually. This brief statement shows the extent to which gratuitous medical relief is furnished in Ireland, and justifies Mr. French in his remark, "that institutions so numerous and so important should be placed on a proper basis, and that the funds raised for their support should be applied to regulated and useful purposes."

From the peculiar constitution of the dispensaries in Ireland (amounting, as we have shown, to 626, and giving relief to 1,200,000 persons), the administration of medical relief through them has given rise to numerous and acknowledged abuses. A dispensary is, too often, got up in the following manner:—Two or three country gentlemen, having a young medical friend to provide for, or desirous of furnishing medical aid to their tenantry, contrive to raise some fifty or sixty pounds from subscribers. An application is then made to the grand jury of the county, and a sum equal to that subscribed is levied on the county by assessment. A cabin or hut is next allotted for the *locale* of the dispensary; a few bottles filled with drugs placed in it, and the management of the concern is left to the few individuals who instituted the charity. The abuses necessarily arising from or connected with such a state of things were forcibly described by Mr. French in his address to the House of Commons. We must allude to a few of them, although they reflect little credit on the morality of some of our brethren in Ireland, or on the administrative capabilities of the Irish gentry.

In the first place, several of the Irish dispensaries are entrusted to persons having no qualification whatever in medicine, surgery, or pharmacy; in the next place, the establishments are distributed over the country in a most unequal manner; and this arises from the necessity of a subscription being obtained previous to the formation of a dispensary. In some parts of the country they are crowded together; in others there are populous districts, of ten and twelve square miles, without any medical establishment whatever; here we find 1 to every 4,000 inhabitants, there only 1 for 20,000 or 24,000.

The distribution of the fever hospitals is still more irregular; in Kildare they are in the proportion of 1 to 36,000 inhabitants; in Kilkenny, 1 to 33,000; in Wexford, 1 to 26,000; in Mayo, 1 to 366,000; in Donegal, 1 to 289,000; while in Longford, Louth, the Queen's County, and Roscommon, containing an

aggregate population of 615,503, there is not a single establishment for the reception of the poor, when laboring under contagious or severe fever. In seasons of distress, when all feelings of humanity and ties of blood give way before the dread of disease, the wretched sufferer under fever may be seen dying in the ditch side, like a beast of the field. There are 209 towns in Ireland, with populations varying from 1000 to 17,000, without a fever hospital.

The cost of patients in the different infirmaries varies in the most extraordinary degree. In Cork it is £1 6s. per head; in Westmeath, £1 7s.; in Antrim, Cavan, and Kilkenny, from £1 13s. to £1 19s.; while in other towns, as Longford, Wexford, and Drogheda, it varies from £3 5s. to £6.

The expense of each patient in the different fever hospitals likewise varies in an unaccountable manner, being as low as 14s. per head in some places, and rising, at others, to the enormous sum of £7 14s. 7d.

Such are some of the evils connected with the administration of medical charities in Ireland; they evidently depend on want of supervision, and would soon be removed by efficient control.

Other abuses, however, depend more immediately on the medical officers connected with dispensaries, and of these Mr. French cited several striking examples. The law, for instance, requires that no medical officer should reside more than five miles from his institution; but this salutary regulation was evaded or violated in a great many cases; in several parts of the country the medical officer resided from eleven to fourteen or eighteen miles from his dispensary; at Dromore West, in Sligo, twenty-one miles; at Arran, Galway, forty miles; and at Binghamstown, Mayo, a "thrifle" of fifty miles.

Abuses of this kind might, perhaps, be accounted for or palliated on the plea that no decent habitation was to be found within fifty miles of the medical depot; but it is with grief that we record the following, on Mr. French's authority:—

"At Foxford, in the county of Mayo, there was scarcely any medicine, although the large sum of £78 17s. 11d. was alleged to have been paid for it within the year, and payment for the carriage of 30 cwt. of medicine from Dublin was charged in the account. In Dunmore, in the county of Galway, carriage of 17 cwt. of medicine within the year was charged; £9 18s. 9d. for lard; £2 8s. 6d. for candles. In West Cove, county of Kerry, the medical man was discovered furnishing incorrect accounts; charging £16 6s. 7d. for medicine, for which the druggist who supplied the institution had charged but £7 14s. In Pallaskenny, county of Limerick, the medical officer was permitted to sell the dispensary medicines, reserving to himself three-fourths of the money so received. At Ardfort, in the county of Kerry, notwithstanding the remonstrances of the subscribers, the dispensary medicines were kept in the doctor's private shop, mixed with his own. At Cookstown, in the county

of Tyrone, the medicines were limited to a few articles, wanting some of the most necessary; those few thrown together in great disorder. Inquiry was made where the remainder was kept? and the reply was, there were no more; it then came out that though the gross expenditure of the institution for the last three years had amounted to £324 17s. 9d., the cost of medicines during the same period was but £13 2s. 9d. In the Kenmare and other dispensaries the doctor was bound to provide £15 worth of medicine; the remaining portion of the funds went to him for salary. In Caherciveen the doctor paid himself £100; the remainder, were it much or were it little, was to supply medicine."

It is deplorable to think that any amount of neglect on the part of governors or subscribers could have given occasion to abuses of the kind just detailed; and we would sooner an hundred times see the profession crushed under the grasp of the poor-law commissioners than submit to such disclosures without demanding instant remedy for the evil. That remedy Mr. French proposes to furnish in the institution of efficient medical inspection of the medical charities throughout Ireland. According to the plan of the hon. member, four medical inspectors would be appointed, with salaries of £600 per annum; and an unpaid central board, by which all future regulations for the management and control of medical charities, would be directed. The expenses of the establishment would amount to about £4,600 per annum, which might be met by a levy of 5d. in the pound on the annual receipts of the establishments.

This plan has, at least, the merit of simplicity; but we must wait for the details of Mr. French's bill before we can pronounce on the essential point of practicability. In the mean time, we would offer to the hon. member our sincere thanks for the prompt and able manner in which he has come forward to rescue our professional brethren in Ireland from the threatened domination of the officials at Somerset House.

ACADEMY OF MEDICINE, PARIS.

January 31, 1843.

SPONTANEOUS CURE OF POLYPUS OF THE UTERUS.

M. Marchal exhibited a polypus which had separated spontaneously from the uterus. The following is the history of this very curious and rare case:—

A woman, forty-eight years of age, suffered for three years from frequent metrorrhagia, accompanied by pains in the loins and a sense of weight about the pelvis. The medical man who attended her stated that she was affected with inflammation of the uterus, and prescribed several applications of leeches to the hypogastrium, baths, rest, &c. The patient took little heed of the last mentioned advice, and while preparing a bath one day, herself, she felt something give way in the vagina and escape through the external parts. On examination the mass proved to be a true fibrous polypus of the uterus, with a body and pedicle; it was one inch one line in length, by nine

lines in breadth; the extremity of the pedicle presented a lacerated surface which at once indicated the manner in which the tumor was detached from the uterus. In all cases of spontaneous separation of polypi hitherto published the removal took place by ulceration of the pedicle and not by its laceration, as in this instance.

FIBROUS TUMOR OF ABDOMEN.

T—, thirty-two years of age, had been affected for a long time with chronic diarrhœa. Having consulted M. Boulanger, of Calais, for gonorrhœa in July last, a tumor as large as an orange was discovered on the median line just above the pubis. This was taken for a distended and, probably, hypertrophied bladder.

On the 20th of September he again consulted M. Boulanger. The tumor had now passed into the right iliac fossa, and was evidently distinct from the bladder. There was no difficulty in passing either the urine or fœces.

On the 4th of October M. T— was attacked by fever with diarrhœa, severe pain about the neck of the bladder, and great difficulty of making water. The tumor was now as large as the head of a new-born infant; it filled the right iliac fossa and dipped into the pelvis, compressing the neck of the bladder and the neighbouring parts. Various remedies were employed with little effect; and on the 16th of October, as it was impossible to pass a catheter, the tumor was punctured, but nothing escaped except a few drops of dark colored blood. The bladder was punctured on the following day, and the retention of urine relieved, but from this period the patient was tormented by constant tenesmus; soon afterwards the bowels were obstinately constipated, and febrile symptoms with incessant colic, nausea, vomiting, hiccup, &c., set in.

M. Amussat was consulted on the seventeenth day after complete obstruction of the bowels had occurred, and thought the case suited to the performance of the operation for artificial anus; but before he could arrive as Calais it became necessary to puncture the bladder again, and the patient died.

The tumor when removed from the body weighed three pounds three ounces, and was seven inches high by five and a half across. It had been developed in the cellular tissue exterior to the peritoneum, and was of fibrous structure interiorly.

ETHNOLOGICAL SOCIETY.

[A Scientific Society for investigating the Natural History of Civilized as well as Uncivilized Man.]

A numerous meeting of gentlemen interested in the proposal to form a society under the above designation took place at the house of Dr. Hodgkin, in Lower Brook-street, on Tuesday evening, the 31st ult. Mr. Greenhough, M.P., having been called to the chair, Mr. R. King, the gentleman who it may be remembered accompanied Captain Back in his overland journey in quest of Captain Ross, stated the object of the meeting, and read an able and interesting paper from the pen of Dr. Diefenbach, of Giessen, setting forth the desirableness of a society for investigating the natural history of mankind, and pointing out the objects which should engage the attention of such a society. Dr. Diefenbach began by stating, that al-

though the division of mankind into races by well-defined and palpable distinctions is universally recognised, the physical peculiarities of the structure of each race have not been studied beyond some few especial characters in the formation of the skull, whereas the varieties in the muscular development, thoracic and abdominal admeasurement, sexual peculiarities, &c., deserve a closer scientific investigation. The influences of climate, food, habits, religious belief, and other causes, in modifying man's physical, mental, and moral condition, have been but partially and imperfectly studied. To do full justice to so wide a subject would require the co-operation of many observers, and could be hoped for only from the labours of a distinct society directed continually to this end. Such a society would also embrace inquiries into every trace of the history of extinct races, as the geologist inquires into the records of past ages in fossil organic remains; it must accumulate materials for a comparison of every language and dialect in use in modern or ancient times, investigate the written records of every people, from the rudest attempts of the savage to delineate the objects about which he is conversant, up to the most refined poetry by the most intellectual nations; the domestic arts, clothing, military accoutrements, and weapons, of every fragment of the human family. The distinction of races, as well as their admixture, have been attempted to be exhibited upon maps in France and Germany, and, so far as respects Europe, with some success. This society would extend the plan to the whole habitable globe; it should collect specimens of the productions of every country which could influence the habits of its inhabitants, and the manufactures and arts of these to display the ingenuity of every variety of people in appropriating the gifts of nature and applying them to the use of man. The textile fabrics, the canoe, the expedients of mere savages, may suggest notions which civilised man may profit by; the latter may learn from the former the use of many substances for dyeing, for tanning, for employment in the cure of diseases. In the tattooing used by various races may be discovered, by comparison, identity or diversity of origin, and historical or mythological meanings, hitherto unsuspected. By bringing together models of the wigwams of savages, the humble cot of the agricultural tribes, the structures of the more advanced, may show us the origin of many architectural principles, and elucidate the direction taken by various nations in their domestic, ecclesiastic, and military edifices.

In short, mankind under every aspect seems to be a proper subject of study, and to complete our knowledge a society is indispensable. Much information is scattered in the works of historians and travellers of all nations, and can only be brought together by the efforts of many.

In Paris a society, formed chiefly through the exertions of our illustrious countryman, Dr. Edwards, has existed for some time, and has been remarkably successful. England ought more especially to forward the progress of this branch of science, inasmuch as her empire extends over a greater diversity of races than any nation upon earth, and is indeed brought into contact with nearly every race. In India, China, the South Seas, the Mediterranean, the Cape of Good Hope, North America, English society is brought

into contact with every form under which mankind exists; and shall not we take sufficient interest in this study to have a society devoted to its advancement? to exhibit the profundity of the laws upon which these broad distinctions of the several parts of the human family are dependant? Dr. Dieffenbach quoted from Herder the remark, that the very early period at which the Asiatic female arrives at womanhood modifies and shapes all the social relations, moral principles, and political state of Eastern people. In conclusion, he expressed a hope that an Ethnological Society would be formed, and receive the active support of the learned and scientific in this country.

It was then moved by Dr. Granville, and seconded by Dr. Hodgkin, that it is expedient an Ethnological Society be formed, and that a committee consisting of the chairman, Mr. King, and Dr. Hodgkin, with power to add to their number, be appointed to form the society and prepare a code of laws for its regulation, which was carried unanimously. It was understood that another meeting should be convened on Tuesday, the 14th instant, when a paper, embracing an explanation of the course and proceedings of the Ethnological Society of Paris, since its formation, will be read.

NORTHERN HOSPITAL, LIVERPOOL.

STRANGULATED HERNIA—THE STRANGULATION CAUSED BY THE SAC, WHICH HAD BEEN RETURNED INTO THE ABDOMEN ALONG WITH THE INTESTINE.

[*Practice of Mr. Banner.*]

Thomas Johnson, aged forty-two, was admitted into the Northern Hospital with urgent symptoms of peritonitis. The history given of the case was as follows:—The patient has been subject to inguinal hernia for many years; he had always been able to return the gut. On the present occasion the gut had descended two days previous to his admission, when he was seized with great pain in the bowels and constant vomiting; he was unable to return the tumor as usual (which had always descended as low as the scrotum), and sent for a surgeon, who bled him, and used the taxis, and ultimately succeeded in returning the contents of the tumor, which had been of the size of an egg. The vomiting and pain continued up to the time of his admission; the bowels had not been relieved; there was extreme tenderness of the abdomen; pulse very quick and weak; the tongue furred; great thirst, and vomiting. He again was carefully examined; the ring could be clearly felt; there was not the least indication of a tumor. The case was treated actively for inflammation, but the patient died on the second day after admission.

Autopsy.

A small knuckle of intestine was found just within the inner ring, strangulated by the sac; this portion of gut was mortified; the peritoneum was in a high state of inflammation.

COMMINUTED FRACTURE OF THE ULNA AT THE UPPER THIRD—FRACTURE OF THE RADIUS—LACERATION OF SOME OF THE FLEXORS OF THE FOREARM—NO PULSE AT THE WRIST—AMPUTATION DURING THE EXTENSION OF GANGRENE.

Mary Wright, aged nineteen, was admitted into the Northern Hospital on the 17th of May, 1842, under

the care of Mr. Bainbrigg, with the above injury which was caused by machinery. The patient has been employed in a cotton-factory as a winder; she was in the act of passing a rope over some part of the machinery, when her arms got entangled in a wheel. The radial artery was exposed, and pulsated; sensation was considerably blunted, but not destroyed; there was slight collapse; the pulse at the right wrist was 120, and weak; there was a doubt as to whether a slight pulsation could be felt at the left wrist; the face pallid; the surface of the body cold. In consequence of the patient's youth, and from her previous healthy state, it was determined in consultation to endeavour to save the limb, which was placed on a pillow, and warm water dressing applied; mild stimulants were administered.

18. She slept a little during the night; does not complain of pain; the limb looks well; there is little swelling or inflammation present; she has sensation, though imperfect. She states that the very tips of the ring and little fingers feel numb, and the first finger aches, and has an occasional pricking sensation in it.

19. She has passed a sleepless night; the pulse at the right wrist is 140, and weak; the face is flushed; tongue moist, but furred; the arm is more swelled, particularly above the elbow; there are a few vesicles formed on the forearm, containing a dark fluid; there is a sphacelated spot in the middle of the forearm; there is numbness of all the fingers; a sensation is communicated to the surgeon's fingers on pressing the wrist, very similar to the crepitus in emphysema; there is slight lividity over the back of the hand; she feels great pain when the hand or wrist are pressed; the wound looks sloughy.

20. The patient is much freer from pain; the hand is cold and livid; the pulse 140, and weak; the tongue moist, but furred; secretions good; the gangrene on the arm has extended.

21. The hand is mortified as high as the wrist; the gangrene of the forearm has extended considerably. The arm was amputated above the elbow.

Appearances of the Arm when Removed.

The flexors of the forearm had nearly all been divided; the radial and ulnar arteries were ruptured about an inch and a half from the bifurcation; the interosseal was given off just above where the radial was ruptured, and which contained fluid blood.

REMARKS.

It will have been observed that, in the foregoing case, there was sensation in the hand for nearly three days. There were several who thought they felt a weak pulsation in the radial artery at the wrist. May not these features in the case be accounted for from the fact of the interosseal artery remaining uninjured? The amputation was performed during the rapid extension of gangrene. The patient recovered.

INDIAN HEMP.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—With reference to my paper on the Indian Hemp, lately inserted in your Journal, I trust I may be permitted to disclaim any wish to advance these preparations as specifics in the treatment of tetanus, or

in spasmodic diseases generally. That hemp possesses great, indeed extraordinary, anticonvulsive power, I feel assured from numerous facts which I have myself observed, and which others have also witnessed. The cases of the six horses affected by traumatic tetanus, recorded in my paper, of which four recovered, are almost enough by themselves to convince any unprejudiced person of the energy and promise of this drug.

Many failures must be expected at first, from the salutary caution all good practitioners must observe in the doses of a remedy with which they are not practically familiar. On this point I have further to remark that in a case of traumatic tetanus, now under treatment, fifteen grain doses of the resin have been given every second or third hour, and of these doses five taken before narcotism was induced.

In cases of tetanus, I consider no trial of the drug at all conclusive, unless it has been pushed to the extent of inducing stupor and insensibility.

Too much importance has been attached by commentators on my paper on the occurrence of *cataplexy* as an effect of this drug; cataplexy I have witnessed unequivocally in many cases, but the effect is not an universal one; I have seen it produced by ten drops of the tincture, and by one grain of the resin. But, on the other hand, I have given fifty grains in one day to a tetanic patient without any such effect being observable.

It seems quite evident, from the experiments made by Mr. Ley and Dr. Pereira, that much larger doses must be used in this country than those we found sufficient in India. The cause of this is possibly to be traced to molecular chemical changes taking place by age in the constituents of the drug, and analogous to those familiar to the profession in the case of hemlock and its active principle.

The tincture, made by dissolving the extract in spirit, I consider the best form of the drug for use in tetanic cases—or the resin may be made into an emulsion, by trituration with a little flour, carbonate of soda, and mucilage. The soda tends to dissolve the resin, and its use is in accordance with the precepts of the ancient Eastern writers, who prescribed hemp with alkaline substances, and used acids in various forms (such as oxymel and sorrel wine) to counteract its effects when taken in overdoses.

In conclusion, I venture to refer to the very interesting cases lately published by Mr. Ley, in the "Provincial Medical Journal." Another memoir from the same able pen, will, I understand, soon appear, and will afford ample evidence of the therapeutical value of this agent. Mr. Ley informs me that of the *anticonvulsive* power of the hemp he entertains no doubt. This is the great, the valuable result to look for, all else is comparatively of but little importance. On some minor points Mr. Ley's results differ from mine. This must be regarded as a proof of the accuracy of his observations—that he is recording faithfully what he sees, and is not merely treading in the footsteps of another.

I am, Gentlemen,

Your faithful servant,

W. B. O'SHAUGHNESSY, M.D.

London, Feb. 8, 1843.

P.S.—I would take the liberty of inviting experimentalists to the repetition on the hemp resin of the

processes for preparing conia and nicotina—namely, by distillation with caustic potash or soda and water, receiving the distilled liquid in dilute acid, and redistilling this with an excess of alkali as before. My departure from India interfered with my trial of this process, and I think it likely to lead to valuable results.

REMARKS

ON

PHRENO-MAGNETISM.

"Were I in England now (as once I was) and had but this fish painted, not a holiday fool there but would give a piece of silver: There would this monster make a man: When they will not give a doit to relieve a lame beggar, they will lay out ten to see a dead Indian."—TEMPEST.

"It is a sleepy language; and thou speakest out of thy sleep: What is it thou didst say? This is a strange repose, to be asleep with eyes wide open; standing, speaking, moving, and yet so fast asleep."—IBID.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—A Mr. Spencer Hall has recently been delivering, in the city of York and other places, a series of lectures, illustrated by experiments, on what he calls "phreno-magnetism." As these lectures have created considerable sensation, and as the said Mr. Spencer Hall has at least magnetised the purses of the worthy but somewhat credulous citizens of York to some purpose, I have deemed the subject not unworthy of a few observations. It may be thought by some persons that the theory promulgated by this charlatan is too ridiculous to require serious refutation: I may or I may not agree in that opinion; but this fact is to me quite evident, that things which in themselves are trifling, may be swelled and magnified into importance where a large portion of public attention is bestowed upon them. In Sheffield, in Wakefield, and in York, a great number of people, and—*mirabile dictu*—very many of them members of the medical profession, have been infected by the phreno-magnetic mania, and they go about from house to house see-sawing with their hands, darting with their fingers, staring with their eyes, and tickling up the craniological bumps of their male and female acquaintances. It therefore becomes the duty of the press to take up the matter, and abate the nuisance by unmasking the imposition. I write, not as a medical man, but as a member of a profession in which I am accustomed to inquiries, the results of which are determined by the amount and credibility of evidence which are brought to bear on the one side or on the other.

Before I proceed to the remarks which I propose to make on the subject, the title of which I have prefixed to this article, I would preliminarily observe that I am not a determined sceptic as to Mesmerism or phrenology, or any other theory, which—my mind being acted upon by habitual modes of thinking, and my opinions influenced by old-fashioned notions of things, which modes and notions *may*, and very probably *are*, erroneous—has, to me, upon the first face of it, an appearance of absurdity. I say I am not a determined sceptic; I would not prejudice, but I will never consent to give my belief to any novel doctrine or theory,

upon any subject whatsoever, without having full and satisfactory proof of the correctness of that doctrine or theory. I require evidence—clear, undoubted, unsuspected, and unsuspicious evidence. Dr. Johnson has written an admirable essay on the danger of hastily ridiculing the plans and propositions of projectors. Seeing what extraordinary discoveries have been made in science, what wonderful inventions have been produced in art, how the most improbable and apparently impossible theories have been proved to be founded on the immutable principles of scientific truth, it is extremely unsafe, and argues a mind contracted by ignorance, or fettered and enslaved by the prejudices of a partial education, to pronounce decisively, and as it were *ex cathedra*, against any system, which, untested and unexamined, appears to our finite perceptions and imperfect vision ridiculous. One of the most extraordinary discoveries ever made in science was, perhaps, the magnet. If the fact were now stated, for the first time, that a needle, after having undergone a certain process, would point always to a particular quarter, would not that statement be heard with doubt?—would it not be received with caution?—would not a circumstance so mysterious, so irreconcilable with every known principle of science, seem, of itself, to demand the strictest scrutiny, to require the most undeniable evidence of its truth? It is now known to be a fact—*why* it is so we have yet to learn; it is a mystery which remains to be unfolded by some future revelation. If any one should now profess to doubt the power and quality of the magnet we should set him down as an ignoramus or an idiot. The projected discovery of America by Columbus was laughed at; Galileo was persecuted because he said that the earth revolved round the sun, and that the latter was stationary; Newton's theory of light, and his statement that white was a combination of all the colors, were, at first, scoffed at; the use of vaccination, as a remedy for the small-pox, when introduced by the immortal Jenner, was viewed as chimerical. For my part, instructed by the lessons of the past, I will never ridicule any project, however preposterous it may appear; I will even admit that the transmutation of metals may not be impossible, nor a voyage to the moon, *per* balloon, *via* space, impracticable—such are my sentiments. But, be it understood, that whilst I dismiss scepticism I suspend belief; whilst I refuse to scoff I hesitate to applaud. I declare myself to be in that neutral state which Locke recommends to all those who are desirous of arriving at the truth; in that state in which I am indifferent to the result, whether that result be the irrefragable proof of the truth or the falsehood of a theory. I will, however, use my best efforts, when the occasion seems to call for them, to expose imposture and unveil deceit, to tear from ingenious falsehood its plausibility, and hold up to execration and derision swindling craft and designing quackery.

There was a time, and that not a distant one, when all the world believed in witchcraft. This belief was not confined to the poor, the miserable, the ignorant, but was most confidently entertained by the wealthy, the intelligent, and the learned. In the year 1664 two old women, called Rose Cullender and Amy Deeny, were tried at Bury St. Edmunds, before that great, good, and learned judge, Sir Matthew Hale, convicted

of the supposed crime and afterwards executed. The summing up of the learned Chief Baron on that occasion is curious, and is a lamentable proof to what human weakness the most intellectual and cultivated men may be subject—to what extent they may be duped by artful imposture, even when practised by the most contemptible and the most degraded of beings. He said “that they had two things to inquire after; first, whether or no these children were bewitched?—secondly, whether the prisoners at the bar were guilty of it? That there were such creatures as witches he made no doubt at all; for, first, the Scriptures had affirmed so much; secondly, the wisdom of all nations had provided laws against such persons, which is an argument of their confidence of such a crime. And such hath been the judgment of this kingdom, as appears by the Act of Parliament, which hath provided punishments proportionable to the quality of the offence, and desired them strictly to observe their evidence; and desired the great God of Heaven to direct their hearts in this weighty thing they had in hand; *for to condemn the innocent and let the guilty go free were both an abomination to the Lord.*” During the trial various experiments were made on the children to prove that they were bewitched, amongst which take the following:—“There were some experiments made with the persons afflicted by bringing persons to touch them; and it was observed that when they were in the midst of their fits, to all men’s apprehensions deprived of all sense and understanding, *closing their fists in such manner as that the strongest man in the court could not force them open*; yet, by the least touch of one of those supposed witches, Rose Cullender by name, they would suddenly shriek out, opening their hands, which accident could not happen by the touch of any other person. And lest they might privately see when they were touched by the said Rose Cullender, they were blinded with their own aprons, and the touching took the same effect as before.”

Can any person, at the present day, doubt that this was imposture; and is there a single jurymen who would not reject with disgust the whole of the evidence which was adduced on that trial, and on which those two poor, infirm, friendless old women were convicted and hanged? Yet men of intelligence, men of learning, men experienced in all the tricks, chicanery, and falsehood which are exhibited in courts of justice—men acquainted from long study and observation with all the turns and twists, the quirks and quiddities, the lights and shades of the human mind, were deceived by them and others of a similar description; and although humane, benevolent, and merciful, laboring under that deception, pronounced the extreme sentence which the law can inflict—that of forfeiture of life. The present age is more enlightened—we do not now admit the possibility of witchcraft—but are we proof against every imposture?—are we incapable of being deceived? When witchcraft was believed, men lent a credulous ear to every tale of wonder; they were predisposed to be convinced. Now, when it is thought to be impossible, no statement of its effects would be credited, and therefore no statement is made. Those who believe in Mesmerism are precisely in the situation of those who believed in witchcraft, the *cause being fully credited,*

every *effect* is received on the slightest evidence. There is a predisposition to be convinced, and imposture is therefore easy.

There are two features in Mesmerism calculated to induce belief; these are the *wonderful* and the *new*. The latter excites curiosity, the former a secret wish that it may be true. The one feeling induces *search*, and the other *faith*. There was a time when astrology was ranked amongst the sciences, and even yet it has some believers. Kings and nobles had their horoscopes cast, and the professors of the swindling mummery were loaded with wealth and honors. When it is considered, then, what gross deceptions have been practised in times past, and are practised in the present day—witness Mormonism in America, which has upwards of a hundred thousand professors—it behoves us to be extremely cautious how we receive as truth the theories of men, some of them doubtless honest, but enthusiastic; others, there is no little doubt, knavish and self-interested. Amongst the theories lately propounded are phrenology and Mesmerism, or, as some persons denominate it, animal magnetism. I prefer the former designation, for it is at any rate expressive of a fact, Mesmer being the name of the German empiric who practised it. The latter is only expressive of an opinion, the correctness of which remains to be proved. Now, I believe that phrenology is true to a certain extent. I believe that a man to possess sense, must possess a fair modicum of brains. I do not say that the human head may *not* be mapped, that every faculty and every passion do *not* reside in some particular portion of the brain, that the place in which each faculty and each passion is deposited has *not* been discovered, and that the phrenologist can *not* unerringly place his finger upon it. I do not denounce these negations, but I require proofs in the affirmative. I believe that to a certain extent there is truth in Mesmerism. I believe that by a peculiar monotonous motion—if the term monotonous may be applied to motion—or by keeping the eye fixed for a length of time on some particular object, a state of *coma*, or even *cataplexy* may be induced. I do not say that a person under the effects of Mesmerism can *not* see with the back of his head, or with his great toe, or with his knee-bone; I do not say that he *cannot* play a tune upon *every* instrument, though he never before played upon *any* instrument; that he can *not* by certain motions with his hands throw another person, sitting in another room, into a state of profound sleep; I do not say that a piece of gold, or a piece of nickel, after having been held for a short space within the palm of one man, and then put into the hand of another, will *not* produce in that other coma, clairvoyance, sleep-walking, and all the rest of the characteristics and features of a Mesmeric state. I do not say that all the effects above mentioned will not, or cannot, be produced, all that I require is evidence that they *can*. But, say the disciples of La Fontaine, of Elliotson, of Mesmer, you *have* evidence. I am dissatisfied with it. I am (I hope) of an ingenuous nature; I am extremely open to conviction; I have *rather* a tendency to the credulous; but I am not gullible. Let me have honest evidence, proceeding from competent witnesses—competent both on the ground of intellect and disinterestedness—and I will believe.

Mr. Spencer Hall (for he claims to be considered the originator of the theory) has struck out a new path; disdaining the somewhat beaten tracks of Gall and Spurzheim, of Mesmer and Elliotson, he has carved for himself a new road to fame and may I not also say to profit? Out of the materials supplied by these men he has moulded a fresh science (!), combining the principles both of Mesmerism and phrenology. To this science he has given the compound name of phreno-magnetism; but in this prolific age of theories why should I be excluded? I have discovered a new science, which consists of the *scientia* or knowledge of Mr. Spencer Hall, and I have bestowed upon it the title of phreno-Spencerian-magnetic humbug. Mr. Spencer Hall was formerly a journeyman printer in the "York Courant" newspaper office; the public will be rather surprised, and indeed it is somewhat paradoxical, that after having been a man of letters he should be an illiterate man. But paradoxical as it may sound, it is, nevertheless, the fact. He himself confesses that he is "a plain spoken man" and not "an acute elocutionist," and he apologises for his limping oratory, saying, "I cannot speak well for them myself, however well I may be able to write for them in private, as in writing we have to employ a different class of faculties to those employed in public speakers." I really don't see why he should write well and speak badly, because in the one he employs a different class of faculties from those which he employs in the other; but, allowing that, he will, I think, admit that the rules of grammar require to be observed in both, and that if a man can write grammatically he can also speak grammatically. There are some things, certainly, which are not perceived in written compositions—for instance, the absence of the *h* without leave, when its presence is really a *sine quâ non*, and the most exasperating "exasperation" of it when its company may be dispensed with. The "Sun" newspaper has a paragraph relating to this gentleman of which the following is an extract:—"Many of our readers, who have by this time, no doubt, been deeply interested by our report, taken a few days ago from the 'York Courant,' of Mr. Spencer Hall's lecture on phrenology and magnetism in that city and Sheffield, in the latter of which *place* he holds a respectable situation, will be surprised to hear that he is the identical individual whom we noticed a short time since, in connection with our popular literature, as the 'Sherwood Forester.' Under that designation he has risen, by original strength of mind and close application, from the humble obscurity of a one-storied Nottinghamshire cottage to a respectable rank in the world of letters; his 'Forester's Offering' and 'Rambles in the Country' having been very widely read and appreciated. We understand that he receives the title of 'A New Wizard of the North' * * He is, we are informed, expected to visit the metropolis, in order that his *startling* observations and discoveries in science may obtain the consideration which, if true, they certainly merit." The "Sherwood Forester" of the present day beats his prototype Robin Hood hollow. He levies his contributions with greater security, and decidedly shoots with a much longer bow. When he visits the metropolis I sincerely trust he will be taken to the *Greenwood*, not

that which erst was situated amidst the romantic wilds of Yorkshire and Nottinghamshire, but that which may be seen daily on the bench of one of the police offices. The "Wizard of the North" may be assured that the law inflicts, now, no punishment for witchcraft, but it does inflict a punishment, and a severe one, on those persons who obtain money under false pretences.

I shall now proceed to his lectures at York on this new science, or rather to his illustration of it, for it would positively be a waste of time and paper to criticise the crude, indigested, indigestible nonsense which he uttered. After his lecture, then, was finished, he commenced his experiments, and, on a sign being made by him, forth issued from the audience a loutish looking lad, who might be, perhaps, about twenty years of age. This youth, we are informed, was by profession a tailor. The phreno-magnetiser having placed him in a chair, began to move his hands after the manner of the Mesmerisers, and in a few minutes threw him into a state of *coma* and *cataplexy*—that is, he pretended to do so. Now, before I proceed a step further, I beg leave to observe, without mincing the matter in the least, that in my firm conviction the whole of Mr. Snip's performance was rank imposture. I do not believe that he was thrown into a Mesmeric state at all; I do not believe that any one of the organs pretended to be excited, was ever brought into activity, supposing the latter to be possible. Mr. Spencer Hall first called into operation the organ of veneration, and the lad fell upon his knees and lifted up his hands as though he were engaged in prayer. Next he touched up acquisitiveness and secretiveness, and he filched, not "from the shelf a precious diamond," but the snuffer-tray "and put it in his pocket." Then conscientiousness, when repentance, that "tender sprite," touched his guilty soul, and he returned it. Then self-esteem, and he buttoned up his coat (that being the way, I suppose, that tailors exhibit a good opinion of themselves), put something to his *sinister* eye, resembling a quizzing-glass, and strutted about the platform. Then aversion, and he turned up his nose and snapped his fingers at his patron. Then benevolence, and he gave him a shilling. Then alimentiveness, and he took an orange out of his pocket and began to suck it. Then form and imitation, and a paper and pencil being put before him, he began to write. Then eventuality, and he "pitied the poor nuns who were confined so." Then language, and he recited—"Near yonder copse where once a garden smiled," &c. Then tune, and he straightway whistled and hummed a tune. Then industry, and he moved his elbows as though he were stitching a pair of small clothes. Then philoprogenitiveness, and he affected to nurse a baby, and so on to the end of the chapter. Now, it was rather a singular coincidence that for the manifestation of alimentiveness he should *happen* to have an orange in his pocket; for that of acquisitiveness the snuffer-tray should be so placed that he should be able to walk straight up to it and put his hand upon it; and for that of benevolence he should happen to recollect (all his other faculties, be it remembered, were asleep, benevolence alone being awake) that in his left side waistcoat pocket there was a shilling. It was fortunate he did not put his hand into the right

side pocket, or into his coat pocket, or into his breeches pocket, for then, probably, the return would have been *nil*, but that he put it into the very pocket in which the odd shilling was contained for that particular purpose. The platform which was raised was of very limited dimensions, and, considering that circumstance, it *did appear* to me somewhat extraordinary that the young man, with his eyes shut, should be able to strut about under the influence of self-esteem, aversion, &c., and yet never transgress its boundaries. The organ of language, I have always understood, is that faculty which enables a person who possesses it to speak with fluency—to utter a number of words without reference to the sense or nonsense which they convey, those words being his own. I have even supposed (but I may have been mistaken) that a full development of that organ enabled him simply to recite the words of others which he had committed to memory. But Mr. Wilmot, such being the name in which the young knight of the thimble rejoices, when his organ of language was excited, attempted to spout a quotation from Goldsmith's "Deserted Village." But *why*, I ask—*why* was he not perfect in that quotation—*why* did his memory fail him—and *why*, I emphatically ask, *did Mr. Spencer Hall prompt him in a whisper*? Yes, sir, I state it as a fact, for the truth of which I pledge my honor, and to which I am ready to bear testimony under the sanctity of an oath, should it be required, that Mr. Spencer Hall did prompt him in a whisper, which whisper was evidently not intended for the ears of the audience, but which was, nevertheless, most distinctly heard by me. This fact alone proves that the whole performance was a trick, a juggle, a cunning device to raise money. It proves that all his manifestations were a mere fiction—a parable of the *bad sower*, conveying this moral, that the most intelligent men are liable to become the dupes of the most ignorant and contemptible. Whilst the first actor was going through his paces, the second one, then in the middle of the room, was heard to say, "I shall *perform* much better when my turn comes." We have been informed by Elliotson, and others learned in the *science*, that a patient when he is awake is utterly unconscious of what has taken place when he was in a state of Mesmeric coma. How, then, could this man know that he would perform better? However, he told the truth, he did *perform* better; he was evidently the better actor of the two; he had been more carefully trained, or his natural talent for the imitation was greater. I am much mistaken if that youth has not been a strolling player, rehearsing, perhaps, in the characters of George Barnwell and Jack Sheppard, the act which he has now begun to play in the drama of real life, and destined not improbably to a similar exit to that of those worthies. His manifestations of tragedy, comedy, self-communion, were all evidently studied, though absurd; in exhibiting tragedy he endeavoured to throw himself into the attitude of the tragic muse; in embodying comedy he laughed idiotically, and, spreading out his hand, placed the extreme end of his thumb to the tip of his nose, a low and vulgar action, not in the least comic, and calculated to excite, instead of a feeling of risibility, an almost uncontrollable desire to kick him out of the room. Self-communion was represented by his seating him-

self upon a chair with a slow and dignified motion, placing one leg across the other, his elbow upon his knee, and his head upon his hand, having the forefinger in a perpendicular position, and the thumb under his chin. What is firmness? I understand it to be a mental fixedness—an innate resolve not to be shaken—a determination not to be moved. It is purely mental, it is the immutability of the spirit within, the existence of which is not expressed by corporeal action, at least very slightly so. There is a compression of the lips, a calm sternness of the eye, which express the soul's deep resolve, but nothing more. If any one wishes to see firmness expressed, let him look at the picture of Napoleon; there it is in godlike sublimity. How did Spencer Hall's buffoon exhibit it? He planted his feet upon the ground with tremendous vehemence, and threw up his arms as if he were going "to pluck bright honor from the pale faced moon," or as if he were challenging the "herald Mercury" to a boxing match. I thought it not unlikely that he had seen Ducrow's representation of Ajax defying the lightning, and that this was a poor imitation of it. To me it appeared as much like firmness as a horse-chestnut is like a chestnut horse. Now, if the various faculties which were pretended to be excited had been really excited, every manifestation would have been natural, for not Art but Nature would have spoken, and her voice would have been echoed by a responsive chord in the bosom of every one present. The organ of dancing, climbing, acquaintanceship, swimming, and destructiveness, were all in their order brought into operation, and he accordingly danced, climbed, nodded to the company, swam, and broke a chair in pieces.

Mr. Spencer Hall attempted to give a specimen of clairvoyance, and he told the company that his subject could see with the back of his head. A medical gentleman signified that he would put him to the test. He took out his watch, and altering it from about ten, that being the period of the evening, to a *quarter past seven*, he put it behind the young man's head—"What is that which is held behind your head?" "A watch"—of course he heard the ticking. "But what o'clock is it?" ay, there's the rub. The impostor did not know that the time of watch had been altered. What is his answer? "Twenty-six minutes to ten." Did he really see the watch? If he did, he would also have seen that the time was a quarter past seven by the watch, though it was not by the night. It is evident that he did *not* see it. Then was he a liar and impostor. The straw slowly and silently floating upon the broad bosom of the mighty river, indicates its course; a feather sailing through the air informs us from what quarter the gentle breeze proceeds, which in an hour or two may rise into a fearful hurricane and spread devastation far and wide. So does a straw, a feather, a very trifle, enable us to detect imposture, fathom fraud, and penetrate deceit. The fact of Spencer Hall's whispering to his tool, and the fact of the young man saying it was twenty-six minutes to ten when it was a *quarter past seven*—these two facts clearly prove that both master and man are impostors. If they impose or attempt to impose in any one thing, what security have you that they have not imposed in everything? None whatever. But some, zealous in defend-

ing this new theory, may say it was impossible so to *act*. Sir, I have shown you that mere *children* acted in such a manner that the great Sir Matthew Hale was deceived by them, and laboring under that deception sentenced two poor old women to an ignominious death. I sum up by declaring it to be my firm conviction that the whole of Mr. Hall's performance was a juggle and a trick, and that he has obtained money from the people of York, and other places, by exhibiting so-called manifestations of the truth of phrenology and Mesmerism, which manifestations were feigned, acted, and false.

I am, Gentlemen,

Your obedient servant,

A BARRISTER ON THE NORTHERN CIRCUIT.

February 2, 1843.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

Feb. 2, 1843.

Mr. F. French gave notice that on Tuesday, the 7th of February, he would move for leave to bring in a bill for the better regulation of medical charities in Ireland.

Mr. Mackinnon gave notice of moving for leave to bring in a bill for the improvement of great towns by preventing human interments therein.

Dr. Bowring gave notice of a motion for Feb. 3, respecting the quarantine laws. This motion had already been brought forward during two sessions, but had been abandoned until further necessary information could be obtained. The motion was subsequently postponed.

Feb. 7.

In answer to a question from Mr. Grattan relative to Mr. Phelan, Sir James Graham said that Mr. Phelan had not been *dismissed*, but that there would be no occasion for his services after the 25th of March next.

[This resembles the species of consolation that Polyphemus tendered to Ulysses.]

MUNIFICENT LEGACY TO ST. GEORGE'S HOSPITAL.

This hospital has been recently enriched by the munificent legacy of £5,000 per annum and £60,000.

PROMOTIONS AND APPOINTMENTS.

War-office, February 3.

4th Dragoon Guards—Assistant-surgeon Edwin Adolphus, M.D., from the 98th Foot, to be assistant-surgeon, vice O'Callaghan, promoted.

12th Light Dragoons—Surgeon James Lowry Tighe, from the 51st, to be surgeon, vice Moffitt, promoted.

19th Foot—Thomas Longmore, gent., to be assistant-surgeon, vice Coghlan, deceased.

51st—Staff-surgeon of second class, John Hartley Sinclair, M.D., to be surgeon, vice Tighe, appointed to 12th Dragoons.

98th—Assistant-surgeon Thomas Horner Wheeler, from the 67th, to be assistant-surgeon, vice Adolphus.

Hospital Staff—Assistant-surgeon Patrick O'Callaghan, M.D., from the 4th Dragoons, to be staff-surgeon of second class.

NAVAL.

Assistant-surgeons—D. Ritchie, to the Cockatrice; W. P. Banks, M.D., to the Fearless; John Thomson, M.D., to the Shearwater.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, February 3, 1843.

R. D. Edgecombe, G. Beddow, J. Morrison, E. J. Shearman, G. Johnson, J. Vincent, T. W. Smith, C. A. Aikin. M. Macnamara, D. Ross.

BOOKS RECEIVED.

Interment and Disinterment, or a Further Exposition of the Practices pursued in the Metropolitan Places of Sepulture, &c. &c. By G. A. Walker, Surgeon. London: Longman and Co., 1843. pp. 28.

A Report of the Cases of Fractures of the Larger Bones of the Extremities, &c., admitted into the Liverpool Northern Hospital, from March, 1834, to 1841. By John M. Banner, Senior Surgeon—[From the Ed. Med. and Surg. Journal.]

Observations on the Extraction of Teeth. With plates. By J. Chitty, Clendon. London: Highley, 1843. 8vo. pp. 80.

Gentlemen desirous of having the "*Provincial Medical Journal*," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

Gentlemen desirous of obtaining numbers of the Journal, from January 1, 1843, to October, 1842 (the commencement of the present volume), are informed that but few numbers remain on stock to complete sets.

The communications of Dr. Hopper, Mr. Meredith, and several other correspondents, in our next.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET,
CAVENDISH SQUARE, LONDON.

PROVINCIAL MEDICAL JOURNAL

And Retrospect of the Medical Sciences.

No. 125.]

LONDON, SATURDAY, FEBRUARY 18, 1843.

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CLINICAL LECTURES

DELIVERED AT THE

METROPOLITAN FREE HOSPITAL.

BY MR. BENNETT LUCAS,

Senior Surgeon to the Institution, and one of the Lecturers on Anatomy and Physiology at the Westminster Hospital School of Medicine.

Lecture V.—Jan. 13, 1843.

GENTLEMEN,—When I last had the pleasure of addressing you I made some general observations on the structure and functions of the urethra in both sexes, rather with a view that we should understand each other fully, when speaking of its diseases, than to furnish you with a minute anatomical description of the parts I then spoke of. Such a study is to be best pursued in your dissecting-room and the anatomical theatre, where you can follow out your investigations in the subject itself, and test, by ocular demonstration, the correctness or fallacy of the descriptions you find in your several systems of anatomy—a task, I may here remark, which is especially important to you at present, as the tendency of the examinations now conducted by the constituted authorities is to ascertain how far the candidate has prosecuted the study of anatomy by actual dissection.

In addition to the observations I made when we last met, I am desirous to add that there are three agents, more or less constantly employed in the performance of the healthy functions of the male urethra, and that the actions of these agents are modified or deranged when that canal is the seat of disease.

The agents to which I allude are elasticity, muscular action, and vascular turgescence. In illustration of these I may briefly state to you that the elasticity of the urethra is most remarkable in its membranous and prostatic portions, so much so that calculi of no inconsiderable size will escape from the bladder and traverse the urethra as far as the commencement of the spongy portion of the canal, where they will be prevented from proceeding onwards. Some time since I assisted Dr. Costello in the removal of a calculus, larger than a kidney bean, from a boy four or five years old, which demonstrated the great elasticity of the prostatic and membranous portions of the urethra. The calculus readily made its way to the commencement of the corpus spongiosum, where it was felt through the integuments, but no force or ingenuity could make it advance farther. It was cut down upon and removed, and the little fellow recovered in a short time. The calculus had constantly advanced to the situation I have stated, and had as constantly receded into the bladder.

What has been termed spasmodic stricture is in most instances produced by the unnatural and powerful action of the muscles which surround the membranous portion of the urethra; and this affection is the best example I can adduce of the effect of the second

agent, although in spasmodic stricture vascular turgescence is also in various degrees present. The action of the *compressores urethræ* are often so energetic and permanent as to oppose the admission of any kind of instrument through the membranous part of the urethra; and in order to relieve the retention of urine consequent upon this condition of the canal, bleeding from the arm, the warm bath, and such remedies are successfully employed; and in two such cases I relieved the patients by the warm bath, in conjunction with taking blood by opening the dorsal vein of the penis.

The erectile *corpus spongiosum* is the usual seat of the vascular turgescence—the third agent which I have mentioned as operating upon the urethra. In the healthy condition of the urethra this turgescence takes place for special purposes, and in disease it constantly exists, either partially or wholly, even to hæmorrhage from the urethra itself, as is occasionally met with in the inflammatory stage of gonorrhœa.

Gentlemen, you are all, doubtlessly, aware that the term *gonorrhœa* is applied to a specific disease which affects the urethra of both sexes, and that it is accompanied with a purulent discharge, more or less profuse, which forms one of its most characteristic symptoms. In general this morbid discharge is preceded by symptoms which at once declare its nature, but at other times such is not the case; and here, if in addition the patient is disposed to mislead you, you may experience some difficulty in forming a correct diagnosis.

It is a singular fact, but every day's experience proves it, that patients, both in humble and in affluent circumstances, when affected with venereal diseases, will apply for relief and exhibit the greatest anxiety to be cured, and yet will make statements the very contrary to truth; will, in short, endeavour to mislead the very persons they apply to for relief, never reflecting for a moment that by misleading their medical advisers they mislead themselves. In this institution we often find patients who have confirmed and well marked gonorrhœa, telling us with the most sober faces that it was occasioned by a *strain* in raising a weight, the back being the part usually referred to; by others, that it arose from exposure to cold; and one man, some weeks ago, would persuade us it was the influenza. (Laughter.) Now, all this is far from being uninteresting, as it shows what you will have to contend against in your after practice, when patients of this silly class apply to you for relief.

Although in the strict etymological signification of the term, *gonorrhœa* is an absurd name for the disease under our consideration, yet it is so sanctioned by custom, and we all so well understand what is meant by it, that I shall not endeavour to supply a better. The disease has also been called *gonorrhœa virulenta*, to distinguish it from other discharges of a milder nature

to which the urethra is liable; but for this distinction there is no foundation, either in pathological phenomena or practical experience. It is now well known that the discharges from the urethra, which have been denominated *gonorrhœa simplex*, have very different origins, are very different in their nature, and require very different kinds of treatment from gonorrhœa. I shall, then, dismiss altogether these terms, and shall speak of *gonorrhœa* as a specific disease, admitting of being distinguished into different stages and presenting marked and characteristic symptoms in each.

It has been thought by many surgeons that gonorrhœa and syphilis are one and the same disease, but for this supposition there appears to me but very little foundation. Mr. Hunter thought both diseases were identical, and endeavoured to prove it by inoculating the glans and prepuce with gonorrhœal matter, which he did in the year 1767; this celebrated case, although sores were produced at the points of insertion of the gonorrhœal virus, and a train of symptoms, having secondary syphilitic characters, followed, yet it has with great truth been questioned if the case proves what Mr. Hunter wished to establish. Mr. Hunter states that the train of symptoms which followed the inoculation took three years in their development, and it has most reasonably been asked, did the patient refrain from exposure to new infection all this time?—or might not the patient, previously to his being inoculated, have had syphilis?—which would at once account for all the secondary symptoms; besides, the ulcers which followed the inoculation did not present the characters of chancres. Mr. Benjamin Bell, moreover, repeated these experiments, or rather witnessed their effects in two individuals, with directly contrary results to those stated by Mr. Hunter. The gonorrhœal matter in these cases was applied to the glans and prepuce “by fretting the skin with a lancet and rubbing the parts with the matter of gonorrhœa; slight sores were produced, but they did not assume the appearance of chancres, and they healed easily without mercury.” But the most decisive experiments in proving the non-identity of gonorrhœa and syphilis are those of M. Ricord, which are too numerous to read to you; suffice it to say, that M. Ricord sums up the results of his experiments in these words—“My experiments prove that the ulcers, which are produced by inoculating the gonorrhœal virus, are not syphilitic, and, at the same time, point out the source of errors which may render these experiments, which appear so simple and decisive, of little value.” As regards my own experience, I shall merely state to you that in no one instance have I ever been able to trace, in this hospital, a secondary syphilitic affection as consequent upon pure gonorrhœa, neither have I ever met a patient, amongst the many who have applied here, laboring under gonorrhœa alone, who was ever affected with secondary syphilitic disease after their cure was affected.

I have always viewed gonorrhœa as a local disease on its onset, but, if allowed to pursue its course disregarded, as being capable of involving other parts besides its original locality, either by direct extension of its specific action, or by that sympathy which is so well known to exist between all parts of the urethra and its appendages, both in health and in disease.

Upon these views I have always acted in its treatment both here and elsewhere, and as yet have not had occasion to regret having done so.

Gonorrhœa admits of being divided into three stages, each of which presents characteristic symptoms, and demands very opposite methods of treatment. The first, or, as I may term it, the premonitory stage, may be either present with or without a discharge from the urethra; the second is always accompanied with a well marked purulent discharge from the canal; and the third is that degeneration of the symptoms of the second stage to which the term *gleet* has been given. I shall now proceed to direct your attention to these three stages of the disease in the most practical manner, by reciting to you cases which exhibit the peculiarities of each, and which you have had abundant opportunities of witnessing for yourselves, making, at the same time, remarks on the symptoms which each presents.

First Stage of Gonorrhœa.

CASE.—William —, aged twenty-seven, a waiter at a hotel, had connection six days ago, and yesterday evening he felt a tickling along the urethra, especially at its anterior part. Last night he made water more frequently than usual, but he attributed this to having drank too freely of gin. This morning he observed his linen to be spotted in several places, and when he last made water, which was an hour ago, he had a slight uneasiness, but not amounting to pain. The lips of the external orifice of the urethra are fuller and redder than they naturally are; the upper surface of the glans for three or four lines is of a brighter red than elsewhere; there is no hardness along the urethra, and pressure of the part does not give him pain. A small quantity of thin muco-purulent matter appears at the orifice of the urethra when pressure is made along the canal. The stains on his linen are circular, and yellow in their centre. This is his first gonorrhœa. He is a married man, the father of two children; his penis is well developed, and the prepuce is off the glans, the covering of which and the membrane forming the inner prepuce partake of the characters of skin. On his making water soon after his application, he passed some six or eight ounces, which came from the urethra spirally, and gave him pain.

Now, this case is a very interesting example of gonorrhœa in its first stage. It is seldom in hospital practice you have an opportunity of witnessing the disease so early, for, in general, when the patients have applied here they have either allowed it to advance to its second stage, or have been taking nostrums of one kind or another for its cure.

The moral anxiety which this patient exhibited from the relationship he held to a wife and family, made him suspect the slightest deviation from the natural feelings and appearances of the parts, and which accounts for his early application here. The first symptoms of gonorrhœa this patient felt occurred five days after connection; this is a very usual time for the disease to appear, but it occurs in most instances earlier, particularly if the patient has had the disease before. The latest period I ever satisfactorily traced the disease to occur after connection was ten days, but there are cases on record in which the disease is stated to have occurred as late as four or

five weeks, and the earliest period was from twenty to thirty hours. In ascertaining this fact it is always necessary to be satisfied that the patient had not a gleet upon him at the time of connection, for many cases occur where a gonorrhœa, in the form of gleet, has been comparatively dormant for weeks or months, and has, in a few hours, broken out with its severest symptoms after an unusual excitement of the organ, or from even having partaken too freely of wine or spirituous liquors; a tickling along the urethra was the first symptom he felt, which was soon followed by the muco-purulent discharge which spotted his linen. Although sensations along the urethra very commonly precede the discharge of gonorrhœa, yet it is often found to come on without any premonitory uneasiness. In young subjects, particularly when they are attacked with gonorrhœa for the first time, the discharge is almost invariably preceded by some pain or uneasiness in the urethra; in elderly individuals, and those who have had gonorrhœa often, the reverse of this is constantly the case.

In the stage of gonorrhœa under our present consideration the discharge is never of that thick, yellow, purulent kind which is so characteristic of its second stage, nor is it so profuse. As in the case I have read, the linen is merely spotted in various places, the spots exhibiting the characters of a pus-stain at one part and of a mucus-stain at another; they occasionally, in other cases, are of a greenish hue. Now, if these symptoms are not promptly attended to by decided and energetic treatment, the disease rapidly gets into the second stage, and all the severe symptoms which accompany it are almost certain to supervene.

Although the urethra in this case was fuller and redder at its external orifice than natural, it is unusual to find any marked appearance of inflammation of this part until the second stage, many interesting examples of which I shall have to allude to by and by; and in the condition of glans and prepuce, such as the patient had, redness and swelling of the glans or urethra are not so constant or so severe as in the opposite condition of these parts. The absence of hardness along the urethra, and of pain upon putting it between the finger and thumb, are what we should have expected. As far as my experience in gonorrhœa has extended, I cannot call to mind one case in the first stage of the disease where the discharge was not confined to the two anterior inches of the urethra; nay, even in its second stage it seldom proceeds from more than one inch beyond this distance. It is of vast moment in the treatment of the first stage of gonorrhœa to bear this in mind, and also to recollect that the parts surrounding the urethra are not yet involved in the disease. From the constancy of the locality of the disease being thus circumscribed, the term "specific distance" was applied, to designate the fact, by Mr. Hunter, and since his time this term has been generally acquiesced in. Now, it is an interesting fact that at this very part of the urethra several large lacunæ are situated, particularly that one to which the term *lacuna magna* has been specially applied. From the time I first dissected this part, which is now some fifteen years ago, I entertained an idea that gonorrhœa commenced in these lacunæ, that during an impure coition some portion of

the gonorrhœal virus—the minutest particle would be sufficient—gained access to the interior, was lodged there, and remained until the specific consequences were developed. It has always struck me, in the study of this disease, as a thing very remarkable, that an individual after an impure connection, having made water three or four times, with a view to prevent the disease, should afterwards have gonorrhœa in all its virulence; yet cases of this kind are so frequently met with by every surgeon, that we must either doubt the veracity of a host of individuals who could have had no object in deception, or admit the fact. In such cases I believe the virus enters one or more of these lacunæ, the orifices of which, be it remembered, are directed towards the external orifice of the urethra; and when we reflect upon the condition of the male organ of generation at the time the infection must be received, the alternate spasmodic contraction and repose of the urethral muscles, together with the elasticity of the parts, I see nothing contrary to the laws of the physiology of these organs to forbid such an occurrence.

If, then, a mere particle of gonorrhœal virus, even diluted with mucous secretion, is capable of producing gonorrhœa, which I believe it to be, and that it be lodged in any of these lacunæ, the reason why it is not displaced by micturition is sufficiently obvious; for the stream of urine comes from behind forwards in the very contrary direction to the orifices of the recesses in which I have supposed the gonorrhœal virus might be lodged.

If the gonorrhœal virus, by mere contact for a few minutes with a sound mucous membrane, be capable of producing the disease, then all our reasoning as to its being lodged in some part of the urethra as being essential to the same effect, falls to the ground. However, I do not believe this to be the case, but, on the contrary, that if the virus be freely washed away, even after it has been in contact with the parts for half an hour, no ill effects will follow. I know individuals who have always guarded themselves from this disease by using mild injections or even cold water after having exposed themselves to the risk of infection; and I believe that, if the same precautions were universally adopted, gonorrhœa would not be so frequent. By adopting this course a fluid is injected from before backwards, the most effectual direction to dislodge any virus from the lacunæ—an effect which micturition cannot produce, for the reasons I have already stated; indeed, the total inefficiency of guarding against gonorrhœa by immediate micturition after connection, is best exemplified by the many patients we meet who have taken this precaution, and who, without having exposed themselves to disease subsequently, have had gonorrhœa. It was the opinion of Mr. Hunter that gonorrhœa always extended from the glans, or from the beginning or lips of the urethra to its inner surface. Now, if this were the case, why should it not continue to extend along the canal in almost every case?—or why should we have the "specific distance" admitted so universally as it is? It is rare to find more than two or three inches of the urethra affected with the disease, at least if judging from the extent of the urethra from which the discharge comes is any proof; and although Mr. Hunter conceived that "it is impossible that any of the venereal matter from the

woman can get into the canal during coition," yet he has not mentioned the grounds on which he makes this statement—an omission which is seldom found in Mr. Hunter's writings when he advances an assertion so positively. Mr. Hunter mentions a single case, which he conceives to amount "to almost a proof of this opinion." "A gentleman, on whose veracity I have an entire confidence, when in Germany, where he had not lain with a woman for many weeks, sat in a necessary-house some time; upon arising he found something that seemed to give the glans penis a little sharp pull, and he found a small bit of the plaster of the necessary-house sticking to it. He paid no attention to it at that time than merely to remove what stuck to his penis; but five or six days after he observed the symptoms of a clap, which proved a pretty severe one. The only way of accounting for this is, that some person who had a clap had been there before him, and had left some venereal matter upon this place, and that the penis had remained in contact with it a sufficient time for the matter to dry." This a very old story, and often related to us here by patients who desire to conceal the truth. The gentleman's veracity in question is merely a matter of opinion, and for my own part, in common with many others who have criticised this case, I cannot but believe that he told Mr. Hunter a falsehood.

Whether gonorrhœa extends from the lips of the urethra to the fossa navicularis and lacunæ, or whether it originates at the "specific distance," is of little moment as regards the treatment of this disease in the stage under our consideration; to know that for a time its influence is local and confined to the anterior inch and a half or two inches of the canal, is quite sufficient for all practical purposes; and proceeding upon these views in the case I have read to you and commented upon, I adopted the following method of cure effectually:—With a glass syringe I injected carefully a solution of nitrate of silver of the strength of twenty grains to an ounce of distilled water; taking care that the solution was well and fully applied to the part of the urethra I intended it should be. I held the penis in my left hand and made pressure with my middle finger two inches behind the urethra, and with my right injected the solution; after the injection was allowed to escape, and the lips of the urethra were separated, the mucous membrane had that molten appearance which such membranes present elsewhere on the application of this agent. I repeated the injection the next day, and on the third day he had a thick yellow discharge with soreness in making water, not scalding; these disappeared in forty-eight hours, and the patient has continued free from all symptoms of the disease.

Now, the cases in which the practice I have just stated to you is admissible, are very few; for it is, as I have already said, a rare occurrence to meet in hospital practice cases of gonorrhœa in its first stage; but in private practice the case is often different, and you will find patients tormenting you to get them rid of so troublesome and dangerous companion at any risk. But to such importunities it is our duty to turn a deaf ear, unless we have a stage of the disease such as I have described, and so certain a remedy as that I have mentioned, to "cut it short" or check it. The application of a strong solution of nitrate of silver to

any of the other stages of gonorrhœa, or even as the first stage of the disease is verging upon the second, only adds fuel to fire, and hence the reason in all probability that this remedy has been condemned by others.

In applying a solution of nitrate of silver to the urethra, the patient should never be entrusted to do so, as is so often the case with other injections; indeed, it is very seldom you will find a patient apply any remedies properly when left to himself. On its being used there is always some pain experienced, but this should not prevent our applying it to the entire surface of that part of the urethra between our finger and the orifice. If we only apply it partially we add irritation of a severe kind to a specific disease, and in a short time matters are in a much worse condition than before. I need scarcely tell you that the patient was enjoined to observe quietude, to live temperately, and avoid spirituous drinks—a course which it is always desirable patients similarly circumstanced should pursue.

At our next meeting, Gentlemen, I shall continue this subject.

CASE
OF
FREQUENTLY-RECURRING PNEUMONIA,
SUBSEQUENT TO PLEURITIS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL
JOURNAL.

GENTLEMEN,—I beg leave to enclose you a case of pneumonia, which was particularly interesting to me, and which, if you think of sufficient importance, may be published in the Provincial Medical Journal. I consider it only the duty of medical officers attached to large provincial hospitals to send notes of their more important cases to you, and from my position as physician to the Leeds General Infirmary and to the House of Recovery (Fever Hospital), Leeds, it is not impossible I might contribute occasional cases of interest.

I am glad to say your Journal is giving great satisfaction to the members of the profession in this important county.

I remain, Gentlemen,

Your obedient servant,

R. S. HOPPER, M.D.

3, East Parade, Leeds, Jan. 12, 1843.

Thomas Taylor, aged forty, plasterer, a native of Keswick, was admitted into the Leeds General Infirmary, November 7th, 1842. The patient is of a strong and healthy appearance of body; he states that about five weeks ago, when at Hull, he was exposed to wet and cold, and was seized with the general symptoms of fever; at this time he was also attacked with severe pain in the lower portion of the right side, accompanied by cough, dyspnœa, but very slight expectoration. The pain has remained more or less severe up to this date. Has employed no regular medical advice.

Present Condition.—Complains of considerable pain in the lower portion of right side, increased on coughing, which is of a loud and barking character, and

much increased during the night. The perspiration was formerly very abundant, but is now diminished; the countenance natural; skin cool and moist; tongue clean; pulse 64, rather hard; bowels open; generally lies on his back.

Physical Symptoms.—Sound of chest clear on percussion over the whole of the anterior and upper portion of chest; marked dulness on the lower portion of right side, extending posteriorly to a considerable surface; respiration natural on left side, bronchial in the upper part of right side, entirely absent on the lower and posterior portion; coarse ægophany heard in this region, but very circumscribed. A large blister to the right side of the chest, behind; to be followed by the application of the following ointment:—Mercurial ointment and spermaceti, of each one ounce; camphor, one drachm.

Nitrate of potass, two drachms;
Tincture of digitalis, two drachms;
Tincture of squills, three drachms;
Water, ten ounces. To take one ounce thrice a-day.

Calomel, two grains;
Powdered squill, one grain;
Tartar emetic, one-eighth of a grain;
Conserve of roses, enough to make a pill. To be taken night and morning.

Nov. 9. States that the pain in the side is considerably diminished, and thinks he could lie on either side except for the irritation from the blistered surface. Tongue clean; bowels open; pulse 64, soft; complains chiefly of cough. Continue all the remedies, and to have one ounce of cough mixture when required.

12. Pain in the side very much better; can lie on either side without pain; salivation evident; considerable perspiration during the night. Omit the calomel pills and mercurial ointment.

Infusion of roses, eight ounces;
Tincture of squills, three drachms;
Tincture of digitalis, two drachms. One ounce thrice a-day.

15. Complains much of the salivation; no pain in the affected side; some difficulty of expectoration; pulse 72, rather hard.

Tincture of squills and tincture of camphor, of each three drachms;
Decoction of senega and nitre julep, of each six ounces. To take one ounce every four hours.

Ten grains of compound ipecacuanha powder every night.

17. Complains of not being so well; increased pain in right side; cough increased; entire absence of respiration in lower portion of right side, in the upper respiration is puerile with obscure crackling; mercurial factor is still very evident; pulse 84, soft; expectoration chiefly frothy mucus. Eight leeches to the affected side, to be followed by a blister.

Saline julep, eight ounces;
Solution of tartarised antimony, two drachms;
Tincture of opium, one drachm. An ounce every fourth hour.

19. Respiration labored; expression anxious; perspiration very abundant during the night; cough increased and more difficult; expectoration very copious, composed of very viscid mucus of a dirty brown

color, and mixed apparently with blood; some headache; pulse 96, very small; still pain on right side, increased by coughing; chest dull on percussion in the whole of the lower portion of right side; distinct crepitous râle in this region; salivation still exists.

Diagnosis, pneumonia; prognosis unfavorable.

Tartar emetic, half a grain;

Acetate of morphia, one-eighth of a grain;

Extract of hyosciamus, two grains. A pill to be taken every three hours, unless vomiting come on.

Repeat the blister to the affected side. Gum water as a drink.

20. Symptoms still continue, perhaps with greater intensity. Cough difficult; expectoration extremely copious, less viscid, but still of a brown color, and evidently tinged with blood; pulse 98, small; debility much increased. The antimony has not produced any vomiting, but the morphia has acted strongly on the brain, producing loss of memory, &c., in consequence of which the pills were omitted, and the following substituted:—

Tartar emetic, four grains;

Water, eight ounces. Two tablespoonfuls every second hour.

21. Debility increasing; respiration slow and very difficult; expectoration still copious, and of former character; bowels open; pulse 110, very feeble; no vomiting. Continue the tartar emetic mixture; to have an ounce of port wine in warm water every four hours, if required.

22. Seems rather easier; no local pain; has slept well; cough more free; expectoration still copious, very viscid, and of a light brown color; pulse 96, soft, and weak; mucous rattle in affected side; fæces and urine passed this morning involuntarily; vomiting produced by last dose of medicine. Continue emetic mixture, as required.

Dil sulphate of quinine, twenty-four grains;

Dilute sulphuric acid, three drops;

Confection of roses, enough to form twelve pills.

One every three hours.

Continue wine.

23. Expression more tranquil; breathing easier; tendency to delirium, which became active last night; expectoration still copious and very viscid, but perfectly transparent; complains chiefly of debility; pulse 96; bowels and urine natural; coarse mucous rattle over right side; some vomiting produced by the antimonial mixture. Omit emetic mixture and wine. Continue the quinine pills.

24. Symptoms more favorable; expression nearly natural; cough easier; expectoration of same character; no sickness or nausea; tongue covered with white fur, and dry. Continue pills.

Compound ipecacuanha powder, four grains;

James's powder, two grains. A powder at night.

Apply a blister between the shoulders.

25. Was found asleep during visit, but reported improving.

26. Countenance natural; no delirium during night; complains only of pain from the blister, which has operated well; cough easy; expectoration still copious and viscid; pulse 72, of better volume; tongue cleaning; bowels and urine natural; night perspirations have ceased. Continue the quinine pills every second hour.

27. Has passed a very restless night; shivering and constant sensation of cold, accompanied by cold perspiration; no increase of pain, but cough more difficult; expectoration quite clear, frothy, and less viscid; pulse 104, weak, and tremulous; bowels natural. Continue pills. To have half an ounce of port wine, as required; beef-tea, sago, arrow-root.

29. No more shivering; feels more comfortable; expresses a desire for animal food; no pain of chest; cough free; pulse 84, much firmer. Continue pills. Mutton chop.

December 2. Continues to improve, and is apparently gaining flesh; has slept well; cough easy, and very rare; expectoration much diminished, chiefly mucous; respiration puerile in clavicular region of left side; still entirely absent, with dullness on percussion in the lower portion of right side. Continue remedies.

5. Still continues to improve, and is evidently gaining strength; pectoral symptoms ameliorated. Continue remedies.

8. Is improving, and sits up during the day.

16. Reports himself quite well, and wishes to leave the infirmary.

20. Has complained for the last three days of some increased pain, and to-day all the acute symptoms of pneumonia have recommenced; cough frequent, small, and causes considerable pain; expectoration brown, viscid, and copious, mixed with striæ of blood; pulse 84, small, and soft; tongue quite clean. Omit pills.

Tartar emetic, twelve grains;

Water, twelve ounces;

Tincture of opium, one drachm. Two tablespoonfuls every three hours, the dose being gradually increased to four every three hours.

A blister to the affected side.

22. Symptoms relieved.

It would be useless to continue the report of this case; sufficient to say, this poor man had subsequently two separate attacks of pneumonia, and in both the symptoms were alleviated by the use of tartar emetic solution, but, in the last instance, not until vomiting was produced.

On the 12th of February (having apparently become nearly well) he was seized with symptoms of pleuro-pneumonia of the right side, which, however, were subdued by small doses of calomel and opium, blister, &c. On the 16th the pulse became suddenly weak and fluttering, the expectoration being of a putrid character, and the breath very fetid. On the 17th he died.

Autopsy Twelve Hours after Death.

On opening the thorax, the heart, left lung, and pleura, were found quite natural. The right pleura was almost universally adherent by strong bands of lymph and false membrane, and was with difficulty separated from the ribs and lung. It also contained a small quantity of dark colored serous fluid, and underneath the third rib a considerable opening, of a somewhat valvular appearance, was discovered, from which escaped dirty, unhealthy pus, of a putrid smell. This opening was connected with a small cavity in the upper lobe of the (right) lung. The whole of the right lung was in a hepatised condition, but more particularly the upper lobe, which sank very readily in water. Near this portion was found the abscess,

of a jagged appearance internally, and of the size of a pigeon's egg. The whole lung was beautifully covered with a dense false membrane, upon which were distinctly visible the impression of all the ribs, and the marks of which could not be removed by dissecting off the false membrane.* The intercostal spaces were observed projecting on the right side; on the left they were natural. The bronchial lining membrane was much injected and congested. No trace of tubercular deposit could be found in either lung. Permission could not be obtained to examine the other viscera.

CONTRIBUTIONS

TO

OPHTHALMIC SURGERY.

By JOHN WALKER, Esq.,

Assistant-surgeon to the Eye Hospital, Manchester.

PRIMARY CAPSULAR CATARACT—COMPOUND OPERATION.

S. A. Hyam, aged twenty, applied to me on account of a defect of vision of both eyes, especially of the left, which latter was entirely useless. The affection had been coming on during the last twelve months, and had gradually increased in intensity. She had never had any inflammatory affection of her eyes, nor had they been the subject of any accident.

On examination, the eyes presented a generally healthy aspect; but on looking into the pupil of the *left*, evidences of opacity of the capsule were distinctly visible, principally in its posterior hemisphere, which had a peculiar spotted or streaked appearance, perfectly white, stretching across the posterior chamber at a considerable distance from the iris. There was also a single white spot on the anterior hemisphere of the capsule, near its centre, and another about double the size, but not larger than a pin's head, immediately behind the former, and apparently seated in the outer laminae of the crystalline body, which was otherwise perfectly transparent. In the *right* eye the opacity was limited to a single white spot on the centre of the anterior hemisphere of the capsule. The vision of this eye was not sufficient to enable her to attend to her employment; and as it appeared to be getting worse she was very desirous that something should be done for the restoration of that of the other. She was accordingly admitted into the hospital for the purpose of undergoing the usual operation.

June 25, 1842. The pupil of the *left* eye having been previously dilated by the use of the extract of belladonna, a straight needle was employed to perforate the sclerotica and break up the lens and capsule. A plaster of the moistened extract of belladonna was reapplied and the patient removed to bed.

30. The usual antiphlogistic treatment had been resorted to, and there had been but slight appearances of inflammation since the operation. The pupil had been kept well dilated and the lens appeared as a soft pultaceous mass, a considerable portion of it pressing forward into the anterior chamber.

July 2. For the last two days she had suffered much pain about the eye and head, and there was consider-

* Je n'ai jamais vu pareille chose, et je crois même qu'elle est impossible.—*Laennec Traité de l'Auscultation*, p. 397, edit. 3.

able vascularity of the outer tunics, the pink vessels predominating. Considering that the position of the lens in the anterior chamber and in immediate contact with the iris had excited and was calculated to keep up the irritation, and looking, also, to the future success of the operation, it was determined to extract the softened lens through a small aperture in the cornea. That operation was accordingly performed this day; the extraction knife was passed into the anterior chamber at the outer margin of the cornea, the point of the knife being carried into the centre of the pupil, the aqueous humor and more fluid portion of the lens escaping through the aperture; the scoop was then passed through the wound of the cornea into the pupil, when the remaining portion of the lens was evacuated, leaving the pupil clear, with the exception of a few fragments of opaque matter and a part of the capsule. Strips of plaster were then applied to keep the lids in contact, and the patient put to bed.

3. She had considerable pain yesterday after the operation, which continued all night, but was much abated this morning. The vascularity of the eye was not increased; the pupil was well dilated and a considerable part of it clear; she could distinctly observe surrounding objects, but owing to the irritation could not bear to exercise the organ. A little belladonna plaster was ordered to be applied, and a mild purgative administered.

9. The patient had gone on very favorably since last report, having had but little uneasiness, and the vascularity much diminished. There were still two or three fragments of opaque lens in the pupil and anterior chamber, but they had a soft flocculent appearance; and a large central aperture was visible in the opaque capsule.

Nothing untoward occurred after this. The opaque matter was gradually absorbed and very good vision restored, a small portion of capsule only being observed around the margin of the pupil when much dilated.

In this compound operation, as well as when the needle only is employed, we are generally called upon to resort to an after operation for the removal of the opaque capsule. It occurred to me that when using the scoop for the purpose of removing the more solid portion of the opaque crystalline, that instrument might in most instances be so employed as to make a large central aperture in the posterior part of the capsule, and thus obviate the necessity for ulterior proceedings. Such happened in this case. When the pupil is well dilated the end of the scoop may be passed through the pupillary aperture and so used as to perforate the posterior part of the capsule, which will afterwards contract to such an extent as to leave a sufficient opening for the admission of the rays of light, and consequently render unnecessary any operation for the removal of the capsule.

CAPSULAR CATARACT FROM INJURY—ABSORPTION OF CAPSULE.

Mrs. H., a married female, about thirty years of age, had lost the vision of her left eye in consequence of a blow received nine years before. A white pearly opacity was seen to block up the pupil, which latter contracted and dilated with the utmost regularity. No change was observable in the condition of the iris or any other texture of the eye, and she could readily

discern a light or any shining object. The case appeared to be one of capsulo-lenticular cataract, and on the 22nd of October last, at her request, I performed the posterior operation for solution, but, on endeavouring to break up the lens, I found that there was nothing but opaque capsule, which was very tough and parchment-like, the lens having evidently undergone absorption soon after the receipt of the injury before mentioned. I attempted to divide the capsule into fragments, in which I partially succeeded, and then pushed the entire body out of the axis of vision, into which, however, it very speedily returned. The moistened extract of belladonna was then applied over the orbit, and the usual antiphlogistic treatment enjoined.

The case went on favorably for the first ten days, but little inflammation having resulted, and, there being an aperture in the capsule, she had now regained some power of vision. At the expiration of this term, however, she began to complain of severe pain in the eye, and, on visiting her, I found that a rather sharp attack of inflammation had come on, and I was also surprised to find that the entire of the opaque capsule had come forward into the anterior chamber, lying irregularly across and nearly filling it, and that the pupil had contracted upon it. My first impression was that I ought to puncture the cornea and evacuate the irritating body, but the patient was exceedingly averse to any further operation, and had been very restless and unmanageable at the first, so that I decided on waiting to see if the opaque body would be acted upon by the aqueous humor and removed by the absorbents. I accordingly contented myself with the employment of leeches, blisters, and the ordinary remedies, with a view of diminishing the inflammatory action as much as possible in the mean time. These, however, did not seem of much avail, and the pupil remained closely contracted, notwithstanding the continued use of the belladonna, until a considerable portion of the capsule had disappeared, when the inflammatory symptoms gradually subsided and the pupil expanded. It was about two months from the time of the capsule passing into the anterior chamber before it had become entirely absorbed, and I carefully observed its gradual disappearance under the action of the absorbents. I may here observe that no mercurial preparation was given at any time during the progress of the case. The inflammatory action has now entirely subsided, leaving the pupil slightly contracted, but clear, and possessing the power of contraction and expansion under the varying influence of light. There is no other morbid change visible, except a slight central opacity of the cornea, the consequence of the inflammatory action having extended to that texture, and she is now regaining her vision. Here, then, was an instance in which the removal of a large portion, if not the whole, of the opaque capsule was indisputably removed by the process of absorption—a fact, the possibility of which has been disputed by most writers on ophthalmic surgery.

TUMOR OF THE PELVIS IN A CHILD.

TO THE EDITORS OF THE PROVINCIAL MEDICAL
JOURNAL.

GENTLEMEN,—If you think the following case possesses sufficient interest to find a place in your Journal, you will much oblige by its insertion,

Your obedient Servant,

CHARLES HODGKINS, M.R.C.S. &c.

The parents of W. B., aged seven years, about the middle of November last, observed that, after playing, he came into the house walking in a bent position and complaining of having hurt his belly; but, as no external bruise appeared, they did not think proper to apply for medical aid, and he seemed soon to regain his cheerfulness. He, however, complained in a few days of uneasiness, and of difficulty in passing his urine, getting up frequently in the night and straining very much before he could succeed; this continued for a fortnight, when, the symptoms becoming urgent, I was sent for on the 1st of December.

I found him lying on a sofa, the body bent forwards and the legs drawn up, complaining of great pain in the belly, great heat, thirst, and other febrile symptoms, with constipation of a fortnight's duration, and passing very little water. Thinking, probably, the loaded state of the bowels was the source of all the complaint, I merely prescribed a brisk purgative, with fomentations to the belly; the following day the bowels had acted, but the urine had decreased in quantity. I now ordered another cathartic and anodyne fomentations.

Dec. 3. A vast quantity of fluid stools mixed with scybala had passed; the febrile symptoms less, but the bladder had ceased to act; I therefore introduced the catheter, and drew off three pints of strong smelling urine.

On the 5th, the retention still continuing, I proceeded to examine the case more minutely. On introducing the finger into the rectum, the coats of the bladder appeared to be very much thickened, but I failed to detect any tumor; the abdomen appeared full and rather tender; no particular viscus seemed to be the seat of disease.

8. During the last two days the child objected to the introduction of the catheter, as the urine had dribbled away frequently and involuntarily; but the distension now being painful, he wished it drawn off, after which it was done daily. I now supposed that the bladder might be paralysed from over distension, and endeavoured to introduce a gum catheter, intending to leave it in, but failed, and the patient decidedly objected to the metallic one being left in.

14. To day I again examined per rectum, and found what appeared to be a large tumor occupying the situation of the prostate gland; the general fulness of the abdomen had increased; the bowels continued to act regularly. I now prescribed remedies to reduce the tumor—such as the hydriodate of potass, &c. (leeches were objected to); nevertheless, the disease continued to increase, and by January 10th the fundus vesicae appeared on a level with the umbilicus; the testes were retracted; he began to emaciate; and the appetite became capricious.

January 25. Disease still progresses; he is much

emaciated; the belly very large; one leg (the left) œdematous; the water drawn off has acquired a strong faecal odor; the bladder appears above the umbilicus nearly as high as the pit of the stomach, and a hard substance can be felt across the hypogastrium behind the bladder; this increased so rapidly that a medical friend who visited him with me supposed there was extensive hepatic enlargement. All the symptoms continued to increase till the 2nd of February, when he died.

Post-mortem Examination Twenty-four Hours after Death.

On laying open the abdomen, the bladder appeared occupying a very prominent situation, the neck being seen above the pubis, the fundus in front of the arch of the colon and as high as the inferior curvature of the stomach; its coats were much thickened and very varicose; there was a black patch, as if gangrenous, the size of a half-crown, on the posterior surface; it contained about two pints of urine. The peritoneal cavity contained about a pint of serum of a very faecal odor; behind the bladder a large tumor appeared, occupying the whole cavity of the pelvis; it was firm to the touch, and so completely did it fill up the pelvis that I had great difficulty in inserting a finger between it and the bones, and naturally created surprise that the patient should have been able to pass the faeces. On raising it out of the pelvis I found that it was attached to the bladder in front and to the rectum behind; it joined the bladder about an inch above the entrance of the ureters, occupying the whole space of the trigonum to the apex; the shape was precisely that of the prostate gland; the length was seven inches and the breadth four and a half or five inches; it weighed between three and four pounds; on the posterior surface was a depression or groove, along which the rectum was attached, which enabled the faeces to pass. The ureters, which were distended to the size of a finger, entered it about the middle; on cutting into it the tumor appeared like the structure of the prostate seen through a magnifying glass—spongy in texture and easily broken down—its color was very much that of fresh Castile soap. All the other viscera were healthy, but pushed upwards, the liver being quite up in the chest, and the stomach behind the sternum. The head was not examined.

Bilston, Feb. 8, 1843.

SCROFULOUS ULCEARATION OF FACE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL
JOURNAL.

GENTLEMEN,—I beg to forward the report of the following case for insertion in the Provincial Medical Journal:—

Martha Fowles, forty-five years of age, has been afflicted with scrofula for twenty-three years; part of her nose had been eaten away, and the affection was extending over the neck and forehead when I accidentally met her in the street, and undertook at my own expense to cure her. I mention this because she said to me, "I cannot afford any more money; I have been to every one almost, and I am sure there is nothing to be done for me." I promised her an effectual cure in three months, which has been effected

by the administration of the following medicine, with its accompaniment:—

Hydriodate of potass, two drachms;

Water, one pint. A tablespoonful twice a-day.

The nitric oxide of mercury ointment to be used at the time of taking the medicine.

This mode of treatment was persevered in, and the woman now (after having left off taking medicine four months), instead of being a disagreeable object to every one as well as herself, presents as clean and clear a face as either you or me.

I am, Gentlemen,

Yours, &c.,

HARRY R. LARKE.

Whitchurch, Salop, Jan. 21, 1843.

CASE

OF

STRANGULATED FEMORAL HERNIA— OPERATION.

By J. D. OWENS, Esq., M.R.C.S.L.

The number of persons of both sexes that suffer from hernia, and the danger at all times to be apprehended when the protruded bowel cannot be returned by the means usually employed, render it necessary to give more than ordinary attention to this class of diseases; and the anxiety and alarm of the patient and friends, aroused by the worst anticipations, the baffled endeavours to afford relief, and the hopelessness that seems in prospect, certainly require the exercise of much firmness and intrepidity, and an exact and confident diagnosis. Yet, happily, although so frequently occurring, from the facility with which the intestine is reduced in most instances, it is rarely required to perform the operation—particularly in provincial practice; therefore, in the present case, when the operation was required, the report may be of some interest. It will be observed that the symptoms were obscure throughout, and the strangulation, that existed seven days, so subdued and hidden as hardly to indicate the impending mischief. However, the function of the bowels being obstructed, the sympathetic pains so often complained of, the nausea and sickness more or less persistent, were themselves prominent symptoms of strangulation, but perhaps the peculiarly tense and resisting nature of the tumor conveyed to the practised hand a sensation almost convincing. The operation revealed a segment of intestine protruded through the saphenal aperture, incarcerated by adhesions of long standing, and the stricture bound it so rigidly that not even the flatus it contained could be expelled; at the same time the circulation continued unimpeded, the pains in the part were only slight and transient, and the healthy condition of the viscera remained unchanged.

Dec. 26. I was early this morning requested to visit Mrs. Martha Hughes, Newton's-green, near Craven Arms. The messenger stated her case as being one of twisted bowels, and that she had been without an evacuation for three days. She had a femoral hernia of some years' standing, and a few months preceding her present attack had sought assistance when there existed incipient symptoms of strangulation. The bowel, however, returned sponta-

neously. The history she is able to give of her case is unconnected and imperfect. Has noticed the tumor in the groin often, but it did not trouble her. Thinks it had been always down for some time past; whenever she felt the lock (even when lying down) remembers the kernel was there. Is much nauseated, and vomiting frequently a greenish dark fluid; it is mixed with bile and gastric secretions, but free from stercoraceous odor; she, however, represents the earlier ejections as being very foetid. The hernia in the left groin, the size of a walnut, protrudes from behind Poupart's ligament, is of globular shape, and so tense and firm that the finger cannot impress it; the position of the patient does not affect it, nor does it receive any impulse from coughing. No constriction nor dragging experienced in the abdomen, but erratic pains are ranging about the parts. Employed the taxis; the direction of the patient was so inclined as to relax muscular resistance when compressing the tumor between the fingers and gently urging it downwards from over the falsiform margin, with the other hand it was kneaded inwards and upwards in the line of canal. The attempt was unsuccessful.

Seven, p.m. Castor oil given in the morning was rejected unchanged almost immediately, and a persistent nausea induced. From time to time the slight wandering pains were present, but the taxis again applied was borne pleasantly. According to some late writers, the elevation of the extremities and full doses of opium have done wonders; here they failed; the parts were guarded from active inflammation arising, by a refrigerating mixture applied in a bladder.

27. Had a restless and weary night; slept a few early hours, but sickness and transitory pains had caused her much disturbance this morning; bowels unevacuated; pulse small and fast; tongue white; the glance of the hand on the abdomen causes her to shrink away, but the pain is relieved by firmly directed pressure; the taxis again failed; hitherto the more active and decisive measures had been in abeyance. The patient being sixty-eight years of age, affected with chronic tarsal ophthalmia, and greatly harassed by an old asthma, it seemed judicious to delay as long as quite safe the severer claims on her constitution; but the peculiar condition of the tumor and the eccentric sensitiveness already noticed, rendered further delay hazardous. I therefore bled her from a large orifice to fainting, placed her in a warm bath, injected infusion of tobacco in small quantities, increased until the system was fully influenced, perseveringly using the taxis; and, as these means failed, I announced an operation as inevitable. Eight, p.m.: A consultation was held; the physician considered the case as one of simple incarceration, and gave a favorable prognosis. Prescribed opium and a truss with a hollow pad; could only reiterate the danger and trust to time; the smallness of the hernia augured unfavorably.

28. Restless night; disturbed and anxious mind; the morbid insensibility of the peritoneum recurring at short intervals. Warm flannels placed beneath her linen gave relief; gave a dose of castor oil, and administered a turpentine enema; the latter was dejected, immediately bringing with it the contents of the rectum in a scybalous mass; the oil was rejected in six hours by severe vomiting, it caused much pain

and distress. The patient stated that she was sensible of the medicine to the parts obstructed; the intestines seemed to herself to act upwards, and she experienced relief when the contents were evacuated; palliative treatment merely.

29. Met, at my request, Messrs. Baines, surgeons. The patient's symptoms were still of the same character; pulse fast and small, not hard; tongue dry and brown; bowels unrelieved by any further motion. The above-named gentlemen immediately concurred in the opinion I had already expressed, and the operation was decided on. The patient consented.

Operation.—A bed was arranged, the patient conveyed thither and placed in position. I divided the integument by the \perp incision. The superficial fascia was next raised on a director, and divided by a sweep of the bistoury; the cribriform fascia was now in view, its layers were cut through, the adipose tissue cleared away, and the hernial sac exposed; it was thickened and indurated, firm and tense with flatus, with a pen-shaped neck hanging by a small pedicle from the apex; to rub the sac between the fingers so as to separate the intestine was quite impracticable; the forceps could not hold, but by lateralising the scalpel and pitting the surface by slight scarifyings it was readily seized; the director was now passed and the sac opened; the intestine exhibited the blue color indicating healthy condition of the viscera. Caution was required from the dense nature of the sac and the numerous adhesions existing, which rendered its separation a delicate proceeding; the stricture was found at Gimbernat's ligament, and so rigidly claspings the intestine that the finger-nail could not be inserted without inflicting injury; the director, however, was insidiously passed and the knife traversed into the cavity, when, by carefully turning it upwards and cutting inwards, a few fibres of tendon were divided. The intestine was now easily reduced. On exploring, the ring adhesions were attached to its inner edge; two small vessels furnished blood and were tied; the parts were brought together by a few sutures, interspaced by strips of plaster, and apposition maintained by a lightly turned roller. The patient was now removed to bed, having exhibited great fortitude and spirits, and all exertion was forbidden; the bowels were opened the following day, and continued to act regularly.

The subsequent history of the case became protracted from sloughing of the integument, induced in great measure by the patient's constant coughing preventing union by the first intention; otherwise, the general recovery was rapid, and presented nothing deserving record. A truss adapted to the parts to be worn regularly.

Haymoor, Salop, Feb. 2, 1843.

SUDDEN DEATH FROM INJURY TO THE TESTICLES.

In some parts of Germany a barbarous custom exists, in cases of quarrel, of violently compressing the testicles.

M. Schlesier, of Peitz, relates a case of sudden death from this species of injury. The patient fell to the ground, was seized with violent convulsions, and died in a few minutes.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, FEBRUARY 18, 1843.

The present session of Parliament promises to be one of great interest to the medical profession. Sir James Graham has formally announced his intention of introducing a general measure of medical reform. Last week Mr. French brought forward a bill for the better regulation of medical charities in Ireland; and on Tuesday last Mr. Mackinnon obtained leave to bring in a bill for the purpose of improving the health of towns, by preventing interments within their precincts.

These are, all and each of them, grave and important matters, affecting the interests of many, and the health and well-being of the whole community. For many years has the medical press been engaged in fruitlessly directing the attention of successive governments to these and many other subjects of similar import. Our entreaties were unheeded, our arguments cast away upon dull ears or hardened understandings. No one attempted to deny the justice of our demands, or the vast importance to public health of the questions which we agitated; yet government after government passed away without any effort having been made to redress the grievances of the profession, or any desire having been shown to protect and improve the health of the public.

We had no representative in the Imperial Parliament; we have no representative there, for the only man fitted, by his talents and special knowledge, to occupy the honorable post of medical advocate in the House of Commons, is precluded from so doing by the necessity of passing his time elsewhere, to earn his daily bread.

Instead, then, of boldly coming forward to support our principles, and demand, with a firm voice, redress of our evils, we—the members of the most honorable, the most scientific, and the most useful profession which exists—are obliged, like beggars, to pick up any crumbs of comfort which may be cast to us, and to be thankful for the most miserable of mercies. We are, in truth, a patient and a long-suffering race, ready, when one cheek has been kicked, to turn the other also, and to bear all sorts of humiliations with the meekest submission.

Some there are amongst us who, without returning evil for evil, would fain do battle as becomes men; others, inspired with the purest motives of humanity, are content to do good for good's sake; to suffer neglect, offer passive resistance to oppression, and pursue, with untiring zeal, the noble, but ill-requited purpose of conferring material blessings on mankind, in spite of themselves.

Let us follow, politically, the example of the latter,

and as brighter prospects appear to open for us, let us aid, since we seem incapable of originating, such measures as are really conducive to our own and the public good. We shall refer to them in *extenso*, when the proper time for their discussion shall have arrived.

LUNATIC ASYLUM IN WALES.

Some time since we drew attention to an able letter, from the pen of Dr. Hitch, of Gloucester, on the condition of the insane poor in Wales. It gives us deep-felt satisfaction to perceive that the generous appeal of Dr. Hitch has been met in a becoming manner by all classes of persons connected with Wales, and by benevolent individuals in various parts of the country.

A committee has been organised for the purpose of providing an hospital for the insane poor of North Wales. John Ablett, Esq., has given a site, containing twenty acres of land and valued at £2000, for the hospital; and many munificent donations, amounting, in several instances, to £200, have been contributed by the nobility and gentry more or less connected with the welfare of Wales.

Under such auspices, and for a purpose so truly noble, the proposed plan must succeed. It was the conception of one fully acquainted with the miseries which insanity entails on the poor; and we can conceive no higher gratification than that which must fill the benevolent mind of Dr. Hitch on finding that the good seed he has sown promises so ripe and rich a harvest.

FEMALE EUNUCHS IN CENTRAL INDIA.

The following curious example of the manner in which travellers are occasionally mystified, we extract from a recent number of the "Experience." The original of the extract is published at the expense of the Oriental Society, in a work by Dr. Roberts, a gentleman who had been sent on a mission of scientific discovery into Central India by the Minister of Public Instruction in France:—

"Shortly after my arrival (says Dr. Roberts) at the caravansary of Feridabad, three singing girls made their appearance at my quarters. They danced and sang to the sound of a *tchiloumtchi*; the latter had a slight depression in the centre for the purpose of supporting a *pitel*, which a *fakiri mahouli* twirled in his fingers, thus producing a constant but irregular rooling sound.

The masculine voices of the singers, their lofty stature, and strange movements, made me at first apprehend that they were disguised *thugs*;* but after some conversation, and in consideration of a few rupees, they were induced to visit me, at a late hour of the night, in my quarters. They now assured me that I was the first person to whom they had revealed their degraded condition.

On examining the persons of these individuals, I ascertained the following particulars. There was no

trace of mammary gland or nipple; the orifice of the vagina was completely obliterated, and showed no mark whatever of cicatrix; the meatus urinarius was free and prominent; the cellular tissue of the genital organs completely atrophied, and without hair; the feeling of the part, where the orifice of the vagina ought to have existed, gave the sensation of slight cartilaginous projection, underneath the skin; thighs flattened; no sexual desire or trace of menstrual secretion.

The women were tall and muscular, enjoyed excellent health, and were about twenty-five years of age. They told me that there were several females of their caste (*bhæni*) at Delhi and Agra, but I did not see any of them; besides several medical and military officers of the Company's service, who had lived for many years in India, assured me that they never had any knowledge of the existence of these *hedgeras*.

As to the manner in which the operation had been performed I could not obtain any precise information; but an old Brahmin whom I met at Indore, the capital of Malouah, assured me that the atrophy of the ovaries was produced by pricking them with needles impregnated with the fresh juice of the *bhel-bhoul*."

The poor doctor has been most pitilessly quizzed by all the parties in this affair. To commence with the concert—the brazen "tamtam" y'clept the "*tchiloumtchi*" is nothing more or less than a brass washing basin; "*pitel*" is the Hindustani name of brass. The female eunuchs who figure in the dance are simply the emasculated personages common in Upper India, who invariably assume the female garb, and by long tresses, false mammæ, and bustles, seek in every way to imitate the weaker and better sex.

The emasculating process in India is most comprehensive, all protuberances being removed by knife and cauterization—*saf-kur'd*, or "made a clean business of," as the phrase runs in Hindostan.

The Indore Brahmin must have relished the joke as well as contributed to heighten its flavor by his story of the needle operation. The fruit of the bel (*ægle marmelos*) is simply mucilaginous and saccharine. Few people, however, can play tricks upon travellers with greater effect than the quiet grave Hindu, to whom a green cockney or a Parisian *badaud* is a regular godsend.

ACADEMY OF SCIENCES, PARIS.

January 30, 1843.

PHYSIOLOGY OF DIGESTION.

M. Payen read a report on a memoir by MM. Sandras and Bouchardat on digestion.

The experiments of the authors of the memoir demonstrated a new and very remarkable fact relative to the action of water, weakly acidulated with hydrochloric acid, on fibrin, albumen, gluten, casein, and the animal tissues. All these substances swell, become transparent, and some of them are dissolved. These effects are produced by a solution of six parts of the acid in 10,000 of water.

The authors, however, have gone too far, when they

* Assassins.

consider hydrochloric acid as the sole agent of solution for azotised alimentary substances. Thus, while the acid merely causes fibrin to swell out to a very great extent, but does not dissolve it, complete solution is obtained by adding a few drops of yeast; and this proves that hydrochloric acid is not the only solvent in gastric juice.

We should also, perhaps, take into account the animal substance called *pepsine*, and which MM. Schwann and Deschamps have found in the stomach.

The experiments of the authors, likewise, render it highly probable that when the neutral azotised substances are dissolved in the stomach they pass directly into the veins; gluten is taken up in the same way. Starch and feculent substances are wholly, or in part, converted into lactic acid and thus absorbed.

Fatty substances evidently resist the action of the stomach and pass on into the intestinal canal. The authors regard fat as containing the chief ingredients necessary for the production of chyle.

Feb. 6, 1843.

ELECTION OF MEMBERS.

The candidates for the place vacant in the section of medicine by the death of M. Double, were MM. Andral, Poiseuille, Cruveilhier, Guerin, and Bourguery. On the first ballot, and of 55 voters, M. Andral obtained 42 votes; M. Guerin, 5; M. Cruveilhier, 4; M. Poiseuille, 4. M. Andral was, therefore, declared member of the Academy; and, we need not add, that the election could not have fallen on one more likely to sustain the reputation of that illustrious body.

ENTOZOA IN THE BLOOD OF A DOG.

MM. Gruby and Delafond forwarded some details relative to an entozoon which they had discovered in the blood of a dog. It was found in every portion of the blood of the animal, but the circumstance seems to be accidental, for the authors have since examined the blood of fifteen dogs without finding any trace of the animalculi.

TREATMENT OF CANCER.

In relation to the mode of action of arsenic on cancerous tumors, &c., M. Manec infers from his experiments that the arsenic acts on the cancerous matter by a kind of poisoning, and on the surrounding tissues merely by exciting in them common inflammation. When the cancer sends prolongations into the deep seated parts, these roots are destroyed by the arsenical paste, while the adjacent tissues were merely the seat of suppurative inflammation.

ACADEMY OF MEDICINE, PARIS.

Feb. 7, 1843.

SPECULUM UTERI.

M. Recamier read a note on a new speculum which he had made after various modifications.

TRANSMISSION OF GLANDERS.

M. Renault transmitted several morbid preparations taken from a glandered horse. The following is the history of this curious case, which seems to show that the blood of a glandered horse is capable of communicating the disease to a sound animal.

A man, laboring under glanders, recently died in one of the hospitals. Some pus, taken from the pus-

tules, was employed in the inoculation of a horse, which took the disease and died in fifteen days. During the course of the disease M. Renault conceived the idea of injecting the blood of this horse into the veins of another one. Some blood was first drawn from the jugular vein; on examining it under the microscope, and with different agents, it was not found to differ in any discoverable manner from healthy blood.

About half a pint of blood taken from the affected animal was now injected into the jugular vein of a horse in perfect health; this was done on the 10th of January, and three days afterwards the horse was attacked by glanders.

As the subject of this experiment, however, had been kept in the same quarter with infected animals, it was thought right to repeat it in a more careful manner. Some blood taken from the last mentioned horse was thrown into the jugular vein of another healthy and vigorous horse, which was kept in a stable with sound animals. Still, in three days the horse was attacked and had to be killed. The morbid specimens taken from the horse proved, in a clear manner, that the animal had labored under glanders.

IMPERFORATE ANUS.

M. Amussat showed several children on whom he had performed the lumbar operation for imperforate anus. Some of these cases we have noticed already. One of the children operated on by M. Amussat is now eight and a half years of age, and healthy.

At the last meeting of the Academy, M. Dumas was elected member in the section of physics, by a very large majority.

SHEFFIELD MEDICAL SOCIETY.

January 26, 1843.

W. OVEREND, Esq., the President, in the Chair.

TUBERCULAR PHTHISIS.

Dr. Favell exhibited the left lung of a young man of color, a native of Jamaica. He was twenty-three years of age, and had been resident in this country for about four years. He was admitted into the Infirmary laboring under phthisis in an advanced stage. The lung was excessively tubercular throughout, and a large cavity occupied nearly the whole of the anterior portion.

NECROPSY OF A GRINDER.

Mr. Porter then related the following case:—

William Batty, aged forty-four, of steady habits, had worked at his trade as a fork grinder from the age of thirteen to thirty-one, when he relinquished it from its prejudicial effect upon his health. For eleven years he worked at the making-up of scissors, when he was much exposed to cold, to which he attributes his present state. (Sept. 9, 1842.) When he gave up fork grinding, now thirteen years ago, he suffered a good deal from a short, dry cough, not attended with much pain, and at first with little expectoration, but spitting of blood soon came on; subsequently the expectoration became very copious, occasionally of a black color.

When first seen by Mr. Porter he was extremely attenuated; cough very troublesome, particularly at night; expectoration very copious, generally of a black color, sometimes yellow, and he experienced great

difficulty in raising it; profuse night sweats; bowels regular; urine passed freely; occasionally a pain in the left side, increased by inspiration; voice reduced to a whisper; breathing hurried after any exertion, but he was able to walk to the poor-house, the distance of a mile. The action of the chest confined to the left side, the right being apparently inactive.

On percussion, extensive dulness was found over the whole surface of the chest, rather more strongly marked on the right side; respiration bronchial on both sides; a very slight gurgling towards the apex of the right lung.

The expectoration increased and became more difficult; breathing more laborious; and he died October 9th.

Inspection Twenty-Six Hours after Death.

Body extremely emaciated; abdomen flat and contracted.

Chest narrow, but moderately deep in the antero-posterior direction.

Extremities exceedingly attenuated.

On opening the chest, extensive adhesions existed between the right lung and the pleura costalis on the right side, especially in its upper half.

The lungs did not collapse; their whole surface was covered with black spots about the size of currants, and similar ones were found throughout the whole pulmonary tissue; slightly crepitant, except in the upper portion of the right lung, in which was found a very large cavity, and in a small portion of the left, which was indurated and firmer than the liver. On incising the substance of the lungs a frothy matter exuded; there were no tubercles found.

Besides the small black bodies before mentioned, others were found in various parts of the lungs four or five times as large.

Both kinds were quite black within, and the larger ones of so firm a texture that it was difficult to cut through them, and the scalpel was arrested by a gritty substance. Other bodies, about four times as large as a horse-bean, of a similar character, were found close to the bifurcation of the trachea.

The mucous membrane of trachea was thickened, but no points of ulceration were observed in any part of it.

The air tubes were much dilated, and towards the inferior lobes many were as large as a quill. The most striking lesion was an enormous cavity occupying about one fourth part of the right lung towards its apex; this was a complete sac. No bronchial tubes opened into it. It contained a small portion of the debris of the lungs.

Heart of a natural size; valves healthy; parietes of right ventricle remarkably thin, and it was dilated; aorta excessively pallid.

Nothing peculiar in the abdominal viscera.

This case was one of very considerable interest from the circumstance that the post-mortem inspection of a grinder has been hitherto of most rare occurrence. When they have been admitted into the infirmary, they have very rarely died in the house, as even at the risk of dying on the road home they have almost invariably been removed by their friends—so great has been the prejudice of this class of men against inspection. No reasoning could prevail with them, although

they well know that the nature of their work is such as to lead to a very early death, for they very rarely reach the age of fifty. Cases have of course occasionally occurred, but these have been exceptions to the general rule. The subject has engaged the attention of the medical men of the town, but the want of pathological data has been seriously felt in its investigation. In the "North of England Medical and Surgical Journal," 1830, Sir Arnold Knight published an account of the disease, together with the statistics of the grinders—which appears to be the only treatise on the subject—although, from his account, the same symptoms are produced amongst the leather-dressers of Worcester, according to Dr. Hastings.

ROYAL MEDICO-BOTANICAL SOCIETY.

February 8, 1843.

Earl STANHOPE, President, in the Chair.

ON THE ARTEMESIA ABSINTHIUM.

By Dr. Houlton.

The *artemesia absinthium*, or common wormwood, has been held in estimation as a medicinal plant from the earliest period of medico-botanical history; and although it enters into many official preparations of the continental pharmacopœias, it has no such place in our own, nor has it had since the year 1788; yet it has never been rejected from the *materia medica* of the Royal College of Physicians. It is but little employed at the present time in the regular medical practice of this country. It is a well-known perennial plant, grows in various parts of Europe, the Crimea, Bombay, and Newfoundland. We have several other indigenous species of the same genus; the only one likely to be mistaken for it is the *A. vulgaris*, or mugwort. The stem of this is of a dark purplish color, whilst that of the wormwood has a white, heavy appearance. The mugwort is but slightly bitter; the wormwood is intensely so, with some pungency, and a very strong fragrant odor. The flavor and odor of this plant are very disagreeable to some persons, but not so to others. Dr. Murray, in the "Apparatus Medicaminum," says that, in all cases, the more grateful bitters should be preferred in practice. Other writers have objected to the plant as a medicine, on account of its nauseous flavor, but none have disputed its virtues. It has had numerous medicinal properties attributed to it, the chief of which are antiseptic, anthelmintic, deobstruent, tonic, and stomachic. It has been employed with success in jaundice, dropsy, gout, worms, dyspepsia, intermittent fevers, and various kinds of cachectic diseases. It has been said by some to have a narcotic property; Linnaeus asserts he never observed any narcotic effects from its employment. Some have asserted that it will render bitter the flesh and milk of animals that take it, and that infants at the breast have been affected by the milk of the mothers who have taken the extract.

The forms in which this plant has been employed are powder, extract, conserve, tincture, wine, distilled water, and essential oil. The doses ordered in works on *materia medica* appear to be too strong; for instance, half a drachm of the powder, or an ounce and a half or two ounces of an infusion, made with six

drachms of the herb, to twelve ounces of water. An infusion made with half a drachm of the dried herb (freed from the stalk), and ten ounces of boiling water, allowed to stand for an hour, will produce an infusion of sufficient strength; the dose, an ounce and a half, three times a-day. The tincture is superior to any other preparation, and is made in the following manner :—

Take two ounces of the dried herb, free from the stalk, and sixteen ounces of rectified spirit; macerate twelve days, and strain. This has a most beautiful green color, but fades on keeping, and it possesses the full aroma of the plant, and the bitter flavor in a high degree. Ten or fifteen minims of it will impart a strong flavor to two ounces of water, and form a good stomachic draught.

Wormwood is an aromatic tonic, well suited to various cases of chronic disease in which it is desirable to support the tone of the stomach. Where debility of the digestive organs has been the chief feature of the disease, its adaptation has been evident from the happy results that have followed its administration.

ON THE SWEET ACORNS OF PORTUGAL.

By William Lukin, Esq.

The sweet acorns are the fruit of the aziuheira, the quercus ilex of Linnaeus, a tall forest tree, very frequent in the forests south of the Tagus, but rarely found north of that river. It is extensively planted in the oak woods of the Alentejo, for the hogs, which are driven in large herds into the woods to fatten on the fruit.

There are two other trees, quite distinct in character, producing sweet acorns, which are found, though not so frequently, in the same woods—1, quercus rotundifolia, of Lamarek; 2, quercus ballota, of Des Fontaines. Brotero, in his “Flora Lusitania,” considers both these as varieties of the former. They are smaller trees; all these are evergreen, and the acorns so similar, that it is difficult to distinguish between them without seeing the leaves. In Spain and Portugal, these acorns, roasted like chestnuts, are served up with the dessert; they are also much eaten by the peasants. That the custom of eating these is of some antiquity, may be seen by referring to a very humorous letter in “Don Quixote,” wherein Cervantes represents Theresa Panza as sending a peck of ballotas to the duchess, in acknowledgment of the hospitable reception her husband, Sancho, had met with at the castle.

On the table were placed some very fine specimens of the new citrates and compound salts of iron, presented by Mr. Bullock.

At the next meeting of the society, on Wednesday, the 22nd, Mr. Ley will read a paper on the therapeutical effects of the Indian hemp.

ESSEX AND COLCHESTER HOSPITAL.

Dr. Chambers has been appointed to the office of physician to this hospital, vacant by the resignation of Dr. Maclean.

PAROCHIAL MEDICAL RELIEF.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In reflecting upon the memorial of the council of the Provincial Medical Association, lately addressed to the Right Hon. Sir James Graham, and recorded in your last week's Journal, I cannot refrain from expressing my respectful dissent from that part of their second proposition, which assumes that “it would be impossible for the poor-law commissioners to put forward any one method of payment as equally applicable to all cases and all circumstances.” With the greatest deference to their judgment, I think an universal system or method of payment may be devised, in the operation of which the rate of remuneration per case would necessarily vary according to the circumstances of each district; for it must be allowed that attendance upon a case in town should not be estimated so high as one in the country.

This system consists in a modification of the plan I submitted to the poor-law commissioners in a pamphlet published in 1840, in which I argued the necessity of a standing salary and a payment per case. The commissioners, however, appear rather to sanction, and guardians prefer, an annual salary determined beforehand; this is now of less consequence, since, in future, the appointment of union medical officers will be permanent; but it becomes doubly important that the profession should exert themselves to obtain something like an adequate remuneration for their services. It is now my object to show that the safest and most equitable way of estimating this salary is by following the scheme (with the trifling alteration of combining the fixed and fluctuating salaries, and reducing the per centage to 5 per cent., in consideration of the extra fees now allowed by the commissioners) laid down in the pamphlet to which I have alluded, which scheme is based upon the principle of apportioning the remuneration to the labor required.

The following examples, in round numbers, taken from a proposed rearrangement of the medical districts of an extensive union, with which I am well acquainted, will sufficiently serve my purpose and illustrate the peculiar working of the principle :—

Dis- trict.	Popu- lation.	Area in Acres.	Area in Square Miles.	Aver- age Cases per An.	Esti- mated Salary. £	Aver- age per Case. s. d.
1	7512	12,500	20	400	150	7 6
2	2586	12,780	20	150	70	9 4
3	829	12,768	20	50	25	11 7
4	1983	14,310	22	120	58	9 9
5	2210	14,670	23	140	68	9 8
6	1425	14,630	23	100	50	10 0
7	1048	6,300	10	60	25	8 0
Total	17593	87,958	138	1020	446	8 9

N.B.—The present salaries average 5s. 8d. per case. As it will not be denied that an uniform *plan* of payment would be advantageous to all parties interested in parochial medical relief, I hope I shall be excused in calling the attention of the profession more particularly to the system here recommended. Should any of your readers wish to ascertain the value of a medical district, according to the above scale, I would most willingly assist them upon being furnished with the acreage and the annual average number of cases.

I am, Gentlemen,

Your obedient servant,

E. MEREDITH.

Ludlow, Feb. 7, 1843.

PAROCHIAL MEDICAL RELIEF.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The perusal of a letter of a medical officer, dated January 28, on the approaching poor-law appointments, and of the memorial to Sir James Graham from the council of the Provincial Association, in your last number, dated February 4, induces me to furnish you with a fact or two, if any were wanting, to show the urgent necessity of still greater vigilance and union if we wish to retain even our present position, and to convince your correspondent that he has not gone one step too far in anticipating the possibility of a reduction being made from our present salaries to meet the charges for accidents, operations, &c.

In a former letter I called your attention to the fact that the order of the poor-law commissioners, dated March 12, 1843, was not received by the guardians in most instances until after the election of the medical officers for the year ending March 25, 1843, and that such elections were held valid notwithstanding many illegal and unqualified practitioners had been elected. I may mention the Dorchester and Cerne unions as cases in point; indeed, in the latter union I am told one practitioner possessing *no qualification* was appointed, thus rendering their own "order" null and void for one year at least, and depriving the medical staff of any little advantage to be derived under the new scale of payments.

In one union, incredible as it may appear, a proposal was made and seconded to the effect that it would be desirable to ascertain the probable amount the union might be called on to pay for accidents, operations, and midwifery, and that such amount should be deducted from the salaries at the next election; and in another union it was proposed to deduct the sum of ten pounds as a set off against the few pounds the medical officers had received for *vaccination*. The majority of the boards rejected the propositions, but it is a strong evidence of the spirit of the times, and "I trust, therefore, that an united effort will be made to obtain something like, I will not say an advantageous, but a just arrangement for the future."

I am, Gentlemen,

Your obedient servant,

A MEDICAL OFFICER.

Dorset, Feb. 8, 1843.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

February 7, 1843.

In answer to a question from Mr. Fox Maule, Sir James Graham said that the government were now in communication with the Colleges of Physicians and Surgeons on the subject of medical reform, and were approximating to a satisfactory conclusion. Both of these corporate bodies had agreed to arrangements by which an alteration would be made in their constitutions. It was also the intention of government to introduce a bill for the purpose of effecting certain reforms in the medical profession generally, and he hoped that in a short time he should be able to lay such a bill before the House.

February 13.

The Irish Medical Charities' Bill was read a second time, *pro formâ*, and ordered to be committed this day month.

Lord Eliot took the opportunity of correcting an error into which he had fallen on the introduction of the bill by Mr. French. He had said that *no* suggestions had been made by the profession in Ireland for the improvement of the bill prepared by the poor-law commissioners under his directions. He should have said, that *few* suggestions had been made.

February 16.

INTERMENTS IN CITIES.

Mr. Mackinnon moved for leave to bring in a bill to improve the health of towns, by preventing interments within their precincts. He had hoped that the government would have taken up a subject of such vast importance, but as they had not done so he was bound to persevere. When he first introduced the subject the house seemed disposed to treat it with something like levity, but since then the press had taken it up, and the result was that public opinion was in its favor. A report had gone abroad that the Bishop of London had been concerned in framing this bill. That report was wholly unfounded. Neither the bishop nor any member of the church had had any hand in it. He was himself solely responsible for the measure. It was equally untrue that the bill was at all directed against the interests of the Dissenters.

Mr. Hume thought the evidence on the subject already before the house imperatively called on the government to interfere in a question which required all their weight and influence to carry it. He also wished to see the attention of the government directed more to the state of the drainage of the metropolis, and to the defective regulations with regard to building. Were those things more attended to, London might be the healthiest city in the world.

Sir J. Graham said, when last session he assented to the introduction of the measure he then proposed, he had not bestowed so much consideration on the subject as he since had been able to do. All the appliances at the command of government were directed to obtain correct information as to the details of the question, and he did not wholly despair of being able to propose some measure before the end of the session; but, as he was not now prepared to undertake to do so, he would not oppose the motion of the hon. member, though if it was the same as the measure of the

last session he could not hold out any prospect of being able to give it his support. That measure he understood to have emanated from the hon. member himself, and not from the committee. He felt strongly the importance of the other subjects incidentally alluded to by the hon. member for Montrose, and every effort should be made by wise legislation to promote the health of large towns with reference not only to drainage but also to building regulations. With the view of securing both those objects, it was his intention to advise the Crown to appoint a commission, composed in great part of scientific men, fully to investigate the subject of drainage, being of opinion that this was a point of the greatest importance, on which, without the aid of science, Parliament could not legislate satisfactorily, and there were facilities for dealing immediately with the whole matter in a tangible shape. The sanitary report prepared by Mr. Chadwick impugned the drainage as effected by the commissioners of sewers in Westminster. That board, it was rightly stated, had considerable funds at their disposal; and having expended large sums under the advice of the best civil engineers, the sewerage, they alleged, was perfect and well regulated. That assertion was, on the other hand, denied, and the question should, therefore, be fairly tried by competent authority. If the commission which should be appointed carefully to investigate the subject reported in favor of the sewerage, what had been done in a large scale in Westminster might, being well done, form the ground work of general legislation for other parts of the country. (Hear, hear.) The subject of building regulations was also, from its necessary details, a matter of great difficulty. His noble friend (Lord Lincoln) at the head of the Woods and Forests was prepared, in the course of a few days, to bring in a bill for the better regulation of buildings in the metropolis. The department over which his noble friend presided had the means of consulting the ablest architects, and the provisions of the bill, if found to be satisfactory, would be capable of easy extension to other cities throughout the country. (Hear, hear.)

Mr. Hawes had heard the statement of the right hon. baronet with extreme satisfaction, and could not but indulge the hope that the hon. gentleman who had brought forward the subject of extra-mural interments would be content to leave it in the hands of government. He admitted that the hon. gentleman (Mr. Mackinnon) had devoted much time and laborious anxiety in the preparation of the bill, but still he must be aware that strong objections were entertained to some parts of it, and, in fact, it was impossible for any private member of Parliament satisfactorily to deal with the subject. Although, therefore, he should offer no opposition to the introduction of the bill, he trusted the second reading would not be pressed, at all events until some farther progress had been made in the inquiries which government had instituted.

Mr. Escott cordially approved the suggestion of the hon. member for Lambeth.

Sir W. Clay, Dr. Bowring, and Mr. M. Philips, admitting the necessity of some legislative interference on the subject, also urged the withdrawal of the bill.

Mr. Mackinnon, however, pressed his motion, and obtained leave to bring in the bill,

Mr. Hawes giving notice that, when the bill stood for a second reading, he should move that it be read a second time that day three months.—*Times*.

February 17.

Mr. M. Sutton obtained leave to bring in a bill for the more convenient holding of coroners' inquests. The bill was then read a first time.

HERNIA OF THE APPENDIX VERMIFORMIS.

The occurrence of hernia of the appendix cæci vermiformis is exceedingly rare, and of difficult diagnosis, because it does not form any prominent or notable tumor externally, and alvine dejections take place as well as repeated vomitings. The nature of the case has been generally recognised only at the autopsy. Hévin mentions a case of an abscess which opened in the thigh, having for its origin a hernia of the appendix vermiformis, which had become gangrenous and ulcerated; the fæces had continued to be discharged by the bowels. Dr. Meeling also narrates two cases, in one the operation was performed, and the patient was cured; in the other, the smallness of the tumor prevented the nature of the disease being recognised, and the patient died. Tamarelli mentions a similar case; the sufferer was a woman seventy-eight years of age. In 1837, M. Charvay operated successfully on a child, three months old, for this complaint. The history of the case is published in the journal of the Society of Nantes.

The greater part of these hernias are without any herniary sac. Those only which occur in children, when the appendix adheres to the testicle, as Desault, Dupuytren, Sandifort, and others, have stated, have a containing sac, because the appendix passes into the tunica vaginalis with the testicle.

M. Cabaret has published the details of a case of crural hernia, where the appendix vermiformis was strangulated, in the "*Journal des Connaissances Medico-Chirurgicales*." His patient was a woman, sixty years of age. The disease was at first mistaken, and attended with alvine dejections, without any apparent external tumor in the region of the groin. On the third day, however, the treatment which had been adopted having failed in affording relief, a tumor was discovered in the right crural region. The medical attendant not being able to reduce it, M. Cabaret was called in and the operation determined on. Instead of a herniary sac, the appendix of the cæcum was met with and easily recognised. M. Cabaret incised Gimbernat's ligament, and then, to be more certain of the part strictured, drew down a portion of the intestine, which was separated from the appendix by a deep strangulated furrow. The symptoms diminished in intensity as soon as the intestine had been replaced, and the patient recovered in a fortnight.

RETROSPECT OF THE MEDICAL SCIENCES.

ENCEPHALOID DISEASE.

A man of the name of Marcille, fifty-three years old, was admitted on the 11th of June, 1841, into the Hotel-Dieu, under M. Roux, for an enormous encephaloid sarcocele of the right testicle. The disease was only of six months' duration, but it had made such rapid progress as to be as large as a full-sized fetal head. It was smooth on the surface, not painful on pressure, not transparent, and inconvenient, chiefly on account of its size and weight, rather than from absolute pain. It could be traced as far as the abdominal ring by a voluminous pedicle, which was no other than the indurated spermatic chord. The accompanying general symptoms were broken health, a blueish tint of the skin, loss of appetite, great weakness, &c. The tension of the abdomen prevented the discovery of cancerous disease in either the liver or mesentery; the affection of the chord seemed to terminate at the abdominal ring—at least it could not be traced further.

Roux decided on operating, but anticipated a fatal result:—On making the section of the chord at the ring, he found that the disease extended far into the pelvis. He consequently divided the chord as high up as possible. The patient died four days afterwards of intense peritonitis.

The tumor was contained within the tunica albuginea, which was of course greatly stretched; it consisted in part of cavities containing a blackish red fluid, and partly of an encephaloid mass undergoing a more or less degree of softening; the chord was affected with scirrhous, but at the end nearest the pelvis it again showed the characters of the encephaloid disease. When the body was examined after death, it appeared that the poor wretch was completely the subject of the cancerous diathesis. The right spermatic chord was diseased as high as the prostate, that gland and the bladder being healthy, as were the generative organs on the left side. The right iliac fossa contained a vast mass of encephaloid matter in a state of great softening, which extended into the right hypochondrium, embraced the right kidney, which was atrophied, and was prolonged over the right half of the pancreas and part of the duodenum. The liver and stomach were healthy, but there were six collections of encephaloid matter in the lungs. The veins of the abdomen and chest did not contain any tubercular matter.

An interesting case of the same disease, but more local, occurred in the person of a man, named Lardenois, fifty years of age, also under the care of M. Roux. He was a man of a strong constitution, had a good color, and no signs of cachexia. According to his account, the disease for which he was admitted he had borne with for ten years without its becoming worse. He had never suffered much with it, although at times he had lancinating pains. The right side of the scrotum was occupied by a large pyriform tumor without transparency, very heavy, elastic in some parts, where there were evident indications of fluid. The chord was healthy; the scrotum was traversed by enlarged veins; there were not any swollen ganglia in the abdomen; and the general health was good.

The tumor was first punctured with a trocar, when a little blackish red fluid escaped. The ablation of the diseased growth was readily effected, and the arteries tied separately, after which the wound, which was a large one, was dressed. Some hæmorrhage occurred two hours afterwards, but was soon checked, and the wound was cicatrised perfectly in six weeks.

On examination of the part which had been removed, it was found to consist of encephaloid matter in different degrees of softening, and small cavities containing a blackish red fluid. This case consequently resembled the preceding in its pathological aspects, the important difference being, that in Lardenois the disease was local, in Marcille it was general.—*Gazette Médicale*, December, 1842.

POISONING BY CUBEBS.

Dr. Page, of Valparaiso, relates the case of a gentleman who, prescribing for himself, took half ounce doses of powdered cubebs for the removal of a slight gleet. He had used the medicine for a short time without either good or bad effects, when he obtained a quantity of the drug from another shop, and took his usual dose at bed-time. He was discovered the next morning, about twelve o'clock, with the following symptoms: face red and swollen; lips dark purple; mouth containing a viscid, frothy saliva; tongue had a dry and chapped appearance in the centre, and the teeth slightly coated with a brown sordes; veins of the forehead and temples turgid; eyes rolled upwards, and injected, and their pupils contracted to a point; skin moderately warm and moist, with clammy perspiration; feet cool; pulse very slow, moderately full, and dispersed by the least pressure; respiration very slow, short, and gasping. By agitating him violently he was aroused for a moment, uttered some incoherent expressions, and sank back into comatose sleep. The stomach was cleared of its contents by emetics, a small quantity of blood was abstracted from the temples by cupping, and powerful counter-irritation by stimulants and rubefacients externally applied was had recourse to. The patient, however, in spite of all, was evidently sinking; the breathing was short and hurried; the mouth wide, extended, and the jaw fallen; the exhaustion was extreme; and the pulse could be felt feebly on the wrist. At this juncture Dr. Page determined to try the application of the electro-magnetic battery, which was immediately done and with the happiest effects. With an assistant rapidly rotating the wheel, the balls were at first applied to each side of the neck, and then run down behind the clavicles. The arms and body now moved convulsively, but the patient lay as unconscious as before. One ball was now passed over the region of the heart, and the other to a corresponding point on the right side. In an instant his eyes opened widely, and with a ghastly expression of countenance; his head and body were thrown convulsively forwards, and he groaned. He then sank back into his reclining posture and was again asleep. The balls were re-applied in a similar manner with marked results. Reaction was established; the pulse became rapidly developed, and the whole surface warm. The battery

was then no longer required. The patient continued to improve and the next day was pretty well.

As a *pendent* to the preceding cases, Dr. Page quotes from the practice of Dr. Cazentre, the following melancholy instance of death resulting from the use of cubebs:—A French gentleman, laboring under blenorragia, was ordered by Dr. Cazentre to take two drachms of cubebs three times a-day, which had nearly cured him; when, not having any medicine left, he sent the prescription to the nearest shop (the one where Dr. Page's patient obtained his medicine). At bedtime he took half an ounce of the powder at a dose. At seven, a.m., the next day, he was found in bed in a state of insensibility. Dr. Cazentre and Dr. Veillon, who were sent for, found him in the following condition:—the body in a state of supination; all the senses extinguished, without hearing, speech, or movement; the eyelids fallen, and when raised the eyes look cloudy and fixed; the pupils dilated; extremities flexible; heat natural, and equally diffused; face red; pulse slow, feeble, and very irregular; respiration hardly perceptible. Death took place at noon.

The examination of the body took place the next day, and all the cavities and organs were examined with the greatest care. There were not any traces of inflammation in the stomach, which contained a tumblersful of liquid, with a little of the powdered cubebs; the intestines were healthy; the bladder full of crystalline urine; the liver, spleen, and kidneys full of black and fluid blood. The lungs were exceedingly gorged with blood, which, when they were cut into, flowed with great abundance of froth from the bronchia; the left side of the heart was entirely empty, the right full of blood; the aorta and all the arterial system were quite empty, the venous system of the thorax and abdomen, as well as the pulmonary artery, the vena cava and portæ being full of black and fluid blood, flowing abundantly as soon as the vessels were divided. The cerebral veins were also congested, but not to the same extent as those in the thorax and abdomen. Nowhere in the body was there found any red or coagulated blood, but always black and fluid.

Mr. Hogg, by whom the case was sent to the "*Lancet*," states that some of the cubebs which were used was sent over to this country and examined by two eminent pharmaceutical chemists, without their being able to detect any deleterious drug in combination with it. It is not a little remarkable, that in both these cases the patients had been taking cubebs previously without any injurious effects, that they both changed their chemists, each obtaining his drug at the same house, and that both should suffer from the poisonous effects of the pepper last obtained by them. What adds to the interest and mystery of the case is, that Dr. Page's patient had been taking half ounce doses for some days previously, a quantity that is not unfrequently prescribed in this country without injury. To render the statement complete, and to prove that the drug was not adulterated with a poisonous mixture, a series of comparative experiments should have been instituted. As it is, the details are incomplete and unsatisfactory.

CÆSARIAN OPERATION.

Mr. Hooper, of Reading, has added another to the list of cases in which the Cæsarian section has been performed, and has terminated fatally. He was called,

it seems, to a young woman in St. Lawrence's poor-house, who had been, at the time of his visit, in labor for two days, under the care of a midwife, who, when he came, told him she could not find the womb. On examination *per vaginam*, a firm body could be felt by the finger, but no os uteri. The hand was then introduced into the vagina with some difficulty, in consequence of the size of the tumor, which was apparently seated on, and adherent or firmly bound down to the sacrum, and which rising above the brim, filled up about four-fifths of the inlet. The os uteri was now discovered behind the pubis, parallel with the brim, soft, thin, and pretty fully dilated, the membranes entire, and the vertex presenting. Labor pains were rather severe. The patient was visited several times in the course of the day, much valuable time being unfortunately lost, waiting to see what nature would do for the sufferer, although delivery by the natural process was evidently impossible. Early the next day, the patient evincing symptoms that exhaustion was approaching, the operation of Cæsarian section was proposed and acceded to by her as the only chance of saving her life. It was performed by Mr. Maurice. The patient having been placed on her back, an incision was made from about an inch above the pubes to the umbilicus, exposing to view the linea alba. From the extreme tenuity of this part, the next incision, though carefully made, entered the uterine as well as the abdominal cavity, and which, the finger serving as a director, were then opened simultaneously, thereby, as Mr. Hooper naively expresses it, much expediting the operation. A gush of venous blood followed the incision. The child was quickly extracted, and the placenta was immediately afterwards thrown off by the contraction of the uterus, which was firm and complete, and entirely arrested any further hæmorrhage. The edges of the wound were closed by means of three sutures and adhesive plaster, supported by a broad towel pinned round the abdomen. The child was dead. The poor creature survived the operation about forty hours.

On examination of the body, the cavity of the abdomen was found to be filled with bloody serum flowing on pressure through the external wound. Recent peritonitis was general over the whole of the abdominal viscera. The uterus was contracted, and the wound gaping; on drawing it down, the tumor was brought into view, firmly attached to the sacrum by a broad base, passing directly over the conjugate diameter of the pelvis, nearly filling it and resting on the pubes. It was detached from the sacrum with some difficulty, and a bony union was found to exist between it and the first sacral bone of the size of a fourpenny-piece. Its circumference, when first removed, was fifteen inches and three-fourths. It was of a fibrous character, with cartilaginous or bony deposit interspersed throughout its anterior part; a cyst containing about two or three drachms of fluid, and a few flocculi of unorganised albumino-fibrine was found in its posterior part. The pelvis was well formed, and of full size for a woman of her stature. The thoracic viscera were healthy.—*Lancet*, February, 1843.

RUPTURE OF THE STOMACH.

M. Lefebvre, of Rochefort, has collected a series of cases of rupture of the stomach, all terminating fatally, which he has published in the "*Bulletin Générale de*

Thérapeutique." The symptoms indicative of rupture in each instance showed themselves after a full meal, and were accompanied with violent colic, and efforts at vomiting, the latter symptom soon ceasing. In several cases there was neither action of the bowels nor vomiting. Deglutition was easy, but as soon as the fluids reached the cardia, they were rejected without entering the stomach. The rupture was always followed by symptoms of the most intense peritonitis.

In every case related by Lefebvre, the patient was a female; the greater liability of the sex is explained by Soemmering, by the change in the form of the stomach caused by the use of stays.

Although the prognosis must be necessarily a gloomy one, the only hope of safety consisting in the possibility of the adhesion of the edges of the rupture to a neighbouring organ, an occurrence that can only take place when there has been anterior disease, still the patient must not be abandoned; every effort should be made to avert a fatal termination. The principal recommendations offered by M. Lefebvre, consist in the direction to abstain from drinks, the burning thirst being relieved by causing the sufferer to allow small pieces of ice to dissolve in the mouth, and the employment of powerful external derivation to restore animal heat.

If, however, medical assistance is obtained before rupture of the viscus has taken place, and the surgeon dreads its occurrence, the proper proceeding to adopt will be to evacuate the stomach, not by an emetic which might cause the dreaded accident, but by the use of the stomach-pump, as advised by Astley Cooper and Dupuytren.

ACONITE IN RHEUMATISM.

Dr. Busse, of Berlin, has published a monograph on the use of aconite, in which he recommends it in acute as well as chronic rheumatism. If there be a foul condition or inflammation of the primæ viæ, that must be removed by appropriate treatment previous to its administration. He has never seen it cause any excitement of the vascular system, as camphor does. The diaphoresis which it induces is neither preceded nor accompanied by any disorder of the system, and the removal of the rheumatismal pains is obtained sometimes without any increase in the renal or cutaneous secretion. The formula employed by Dr. Busse for the last twenty-five years is a prescription of Richter's, and is as follows:—Four scruples of extract of aconite, dissolved in thirty of tartar emetic wine. Of this at first he gave only small doses, in accordance with Richter's advice, from fifteen to twenty-five drops every two hours, but he soon found he could give double the quantity, not only without danger, but with greater prospect of success. In order to prove the harmlessness of very large doses of aconite, he mentions that a patient took, in the course of ten hours, two scruples and five grains of the extract, dissolved according to the preceding formula, without the supervention of any symptom of narcotism or other serious disorder, the only evidence of its action on the system being a great increase of the perspiration, and at the same time a notable diminution of the pain, which had been experienced with exceeding severity in the morning.

Dr. Busse now begins with from thirty to forty drops at a dose, and rapidly raises it to sixty. He

has found it of equal service in all cases of pain arising from a rheumatic origin, in tooth-ache, cramps of the stomach, &c.—*Hufeland's Journal*.

GALVANISM IN ORGANIC DISEASE OF THE EYES.

Dr. Neumann has recently published three cases of organic disease affecting the organ of vision, in the treatment of which he derived great benefit from the use of galvanism. He says that great care must be had in its application, that the apparatus must be quite clean, and the electric current must be really established before it is actually applied. The galvanic fluid is more efficacious the more readily it is borne, but when the eye becomes the seat of pain under its use, it must, at least for the time, be abandoned, to avoid the occurrence of inflammation. A pair of plates, of from one inch and a half to two inches in diameter, will produce a sensible current, but the action of two pairs is borne by the majority of patients; the application of three pairs is very likely to produce an attack of inflammation. Dr. Neumann recommends galvanism in cases of adhesion of a cataract to the iris, and in opacity of the cornea.—*Caspar's Wochenschrift*.

PLEURITIS—FOUR ARTIFICIAL TEETH IN THE CAVITY OF THE PLEURA.

Mr. Carpenter detailed in the last number of "Guy's Hospital Reports," at some length, the symptoms of a case of fatal pleuritis, with effusion into the cavity of the right pleura, occurring in the person of an assistant to a druggist in the Edgware-road. At the examination of the body after death, the lower part of the right side of the chest still appeared prominent and its surface edematous; the pectoral muscles on that side were undergoing decomposition, whilst those on the left were sound. When the scalpel was passed into the cavity of the right pleura, a gush of very offensive gas escaped; the pleural cavity on that side contained five pints of sero-purulent fluid. The lung was collapsed, and flatly pressed against the bodies of the vertebræ; the pleura which covered it, as well as that of the parietes, was thickly coated with coagulated lymph, which peeled off in layers. On the outer surface of the lung was an old fistulous opening, large enough to admit the tip of the little finger; when cut into, the lung appeared to contain a number of tubercles, some of which had suppurated. Some of the bronchial rings had ossified. The left lung was emphysematous; it contained a number of small miliary tubercles; the smaller bronchial tubes were filled with mucus; the pleura on this side appeared to be quite healthy; the heart and pericardium were also sound; the liver was large, and easily gave way when rubbed between the fingers; its under surface was very dark; the gall-bladder contained very little bile.

After the examination had been completed, and the remaining fluid and coagula of blood that had escaped from the pulmonary vessels were being removed, to replace the lung, an irregular substance was met with which, when examined, turned out to be a piece of ivory worked into four artificial front teeth, covered with a brownish crust, with a pointed piece of silver rivetted into the upper part of the teeth, which had evidently assisted in fixing them to the upper jaw; the base of the silver rivet was surrounded with wadding. At each extremity there were two holes, which no doubt once contained the wire that fixed this mass

of false teeth to the adjoining sound ones. The father of the deceased, on being referred to, stated that his son had swallowed these teeth thirteen years before in a fit of coughing. There was not any wound or cicatrix in the œsophagus, and the only opening through which they could have escaped into the pleura of the right thoracic cavity, must have been the fistulous one in the corresponding lung.

MESMERISM.

The committee of the Chatham Mechanics' Institution having procured the services of Mr. Brookes, the itinerant lecturer on Mesmerism, a lecture on that subject was delivered at the theatre on Friday last, when the house was crowded, the lecturer being backed on the stage by Mr. Thomas Baldock, Mr. Bate, and other Chatham intellectuals of the first water. Mr. Brookes having imprudently offered to operate on this occasion on persons who might be utter strangers both to him and to the science, only stipulating that the operatees should have large heads and black eyes; the company, consisting principally of females, looked anxiously around for some possessing the desired qualifications. Two young women, large headed and black eyed, and strangers alike to Mr. Brookes and to Mesmerism, were at length selected, and successively subjected to the manipulations of the lecturer; but, alas! all was of no avail. They pertinaciously persisted in keeping awake, and after a couple of hours ineffectually spent in the grimaces and manipulations of the operator, the perfect indifference of the patients, and the entertainment of some of the audience, the disgust of others, and the wearying of not a few, the lecturer was compelled to submit to an unqualified failure, and to leave the stage amidst the hootings and laughter of the company, who were not sparing in denunciations of the pretended science of Mesmerism as arrant humbug.—*West Kent Guardian*, Feb. 11, 1843.

OBITUARIES.

At Bath, in the eightieth year of his age, Dr. Henry Locock, formerly of Northampton.

At Brompton, aged thirty, Dr. Robert S. Sims.

PROMOTIONS AND APPOINTMENTS.

War-office, February 10, 1843.

37th—Alexander Forteach, M.D., to be assistant-surgeon, vice Moore, promoted on the staff.

91st—Staff-surgeon of the second class, Samuel Maitland Hadaway, to be surgeon, vice Morgan, deceased.

Hospital Staff—Assistant-surgeon John Wardrop Moore, to be staff-surgeon of second class, vice Hadaway, appointed to the 91st.

NAVAL.

Surgeon—S. Donnelly, to the *Hecla*.

Assistant-surgeons—J. P. Lawrence, John Andrews, and John Callagher, to the *St. Vincent*; G. R. West, to the *Hecla*; Dr. S. Proule, to the *Tartarus*; Dr. H. T. S. Beveridge, to the *William and Mary*.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, February 10, 1843.

D. Morgan, A. L. T. Cooke, T. Graham, S. P. Goddard, W. K. Park, G. F. Fox, H. Payne, J. C. Bonnett, J. S. Woollett, R. Chambers.

BOOKS RECEIVED.

Views upon the Statics of the Human Chest, Animal Heat, and Determinations of Blood to the Head. By Julius Jeffreys, F.R.S. London: Longman and Co., 1843. 8vo. pp. 233.

Pharmacologia, &c. By J. A. Paris, M.D. Ninth edition. London: Highley, 1843. 8vo. pp. 622.

Criminal Jurisprudence considered in Relation to Cerebral Organisation. By M. B. Sampson. Second Edition. London: Highley, 1843. 8vo. pp. 147.

Guide to the Urinary Cabinet, &c. By Robert Venables, M.B. London: Knight. pp. 32.

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Ormskirk.—The appeal ought to have been admitted.

Scarbro'.—The circular has been mislaid. If our correspondent will forward another we shall publish it. Has the document been widely circulated?

Barcelona Journal.—We have to acknowledge the receipt of No. 5 of the "*Repertorio Medico*." Although we may say,

Qua regio in terris nostri non plena laboris,

we were not aware that we had penetrated into the ancient capital of Catalonia. We beg to inform the editor of the "*Repertorio*" that *unstamped* journals do not circulate in England through the Post-office. The contents of this number of the "*Repertorio*" are—

1. On Physiognomy, by Dr. F. Vinader.
2. On the Utility of Isolation in the Treatment of Mental Diseases, by Dr. J. Nadal.
3. On Moral Affections, and their Influence in the Production of Disease, by Dr. M. Segarra.
4. On the Use of Creasote in Caries of the Teeth, by Dr. Caros.
5. On the Comparative Merits of Primary and Secondary Amputations, by Dr. Orfila.
6. Case of Pneumonia without Fever, by Dr. J. Cil.

ERRATUM.

In last Number, page 387, col. 2, line 7, for "*four*," read *fourteen* ounces.

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PRACTICAL OBSERVATIONS ON DISEASES OF THE SKIN.

By THOMAS H. BURGESS, M.D., &c.

No. V.

SYPHILITIC ERUPTIONS OF THE FACE.

The syphilides and the eruption described in my last paper (lupus) are invested with a degree of interest and importance which attach to few diseases within the range of cutaneous pathology. The propriety of introducing syphilitic eruptions amongst diseases of the skin, properly so called, has been questioned by some writers; but the fact of these affections being manifested in the great majority of cases after the primary disease has disappeared, and arising from constitutional, and not local, causes, brings them legitimately within the province of dermatology, and under the observation of the physician.

Although the venereal disease appears to have first shown itself in Europe under the form of cutaneous eruptions, and the earliest writers on syphilis confined their descriptions of that complaint to a pustular affection of the skin, yet, until the early part of the nineteenth century, there was no attempt made to arrange and classify the syphilitic cutaneous diseases under a separate and distinct head. However, about that period these eruptions were grouped together for the first time, and described under the name of *syphilides*; but, as this classification was formed without any reference to the elementary characters of the diseases, distinct varieties were confounded together, and species established on characters that were altogether secondary and insignificant. Such was the history of the syphilides when M. Bielt first turned his attention to the subject, and his admirable and unrivalled essay, published in M. Cazenave's Manual, bears testimony to the value and importance of his researches into the pathology of that interesting family of cutaneous diseases.

M. Cazenave has published within the last month a valuable monograph on the syphilides. It is an amplification, without any fundamental alteration, of the views and doctrines expounded in the chapter on these eruptions contained in his excellent "Manual of Diseases of the Skin." It abounds with interesting cases illustrative of the different varieties of the syphilitic eruptions, and is accompanied by an atlas of twelve plates, which enhances its value materially. M. Cazenave, in an elaborate and lucid exposition of the history of the syphilides, combats the views and conclusions regarding the nature of syphilis lately promulgated by M. Ricord. He admits that no man has had greater opportunities of arriving at sound conclusions on this subject, and that no other pathologist has laboured with greater assiduity to attain that object than M. Ricord; but, nevertheless, he

has not succeeded in clearing up the history of these diseases. "I am aware," says M. Cazenave, "that M. Ricord has made numerous experiments, that he has been able to vary them at will, and that on the great arena where he has taken so prominent a position by his zealous industry, and the *éclat* of his researches, he has been enabled to collect all the elements necessary for rational conviction. Nevertheless, I am compelled to say that he is deceived; he has only regarded syphilis in one of its phases, and, carried away by his love for experiments, he has forgotten that the theory of venereal infection can never be reduced within the limits of a mere experiment."

Independent of the individual or particular symptoms belonging to each species, there are certain *general* characters peculiar to the syphilides, which at once distinguish them from the ordinary affections of the skin. Some of the phenomena are so constant and so distinctly pronounced, that, after being once carefully observed, there is little danger of ever confounding them with the symptoms of diseases not of syphilitic origin. The first and most prominent of these general characteristics is the *color* of the eruption. The syphilitic eruptions of the skin are accompanied by a reddish *coppery* color, *sui generis*. This special characteristic is the most constant and certain of all the symptoms. It is present in every form of the eruptions, although it may not be equally conspicuous in all. For example, the shade may be darker or lighter, according to the region affected, the constitution and temperament of the patient, his age, and the natural color of the skin. Thus, the color may be changed to a violet tint, a brownish, yellowish, or even a bright red hue, always, however, preserving a certain speciality in its appearance, which will not mislead or deceive the attentive practitioner. The *vesicular* syphilitic eruption is the only one of the syphilides in which it is not conspicuous; but it should be remembered that this variety is not so frequently met with as the rest of the syphilides. M. Bielt had seldom seen it. The *form* of this class of affections is almost always circular, especially in the smaller spots, and in the larger ones the tendency to a circle may be traced over the greater part of the patch. The ulceration which succeeds many varieties of the syphilides also possesses special characters not to be mistaken—the deep, rounded excavations, with hard, callous, and sharp cut edges—the serpigenous ulcerations which describe segments of circles, spirals, &c.—the thick, greenish, and blackish scabs, deeply implanted in the skin, which sometimes cover these ulcerations, occurring especially after syphilitic bullæ, pustules, and tubercles—and the peculiar whitish, depressed *cicatrices* which succeed those ulcerated tubercles, pustules, &c., of a zig-zag, spiral, or circular form—are characters so decided and distinct that they cannot possibly be mistaken for those be-

longing to any other class of diseases. Pruritus is not a characteristic symptom of the syphilides; it is, on the contrary, generally absent altogether. Finally, the eruption may appear on any part of the body, but the parts most frequently attacked are the face, forehead, nose, back, and shoulders. The patient generally exhales a peculiar and extremely repulsive odor.

Syphilitic cutaneous eruptions may be divided into exanthematous, vesicular, bullous, pustular, tubercular, papular, and scaly. To these, some writers—M. Gibert, for example—have added syphilitic *epithides*; but the syphilitic origin of these discolorations is considered by many authors to be problematical.

Exanthematous Syphilitic Eruption.

There are two varieties in this species—namely, *roseola syphilitica* and *maculæ syphiliticæ*. The first assumes an acute form, and occurs for the most part upon the trunk and limbs; hence a description of it would be foreign to our present purpose. The second variety of exanthematous syphilitic eruption usually pursues a chronic course, and is characterised by irregularly circular patches, from one or two lines to as many inches in diameter, and even larger, occupying in some instances a great portion of the body, but appearing most commonly on the neck, the scalp, the face, the commissures of the alæ of the nose, the lips, and the forehead. It frequently happens at the commencement of the disease that the rosy red tint of the skin disappearing for a moment under pressure of the finger, masks the characteristic coppery hue; but at a later period, when the latter phenomenon becomes more pronounced, the color will disappear but very imperfectly upon pressure, and then the real nature of the eruption will be more clearly established. In some rare cases the blotches are covered with a slight epidermic exfoliation and attended by a trifling degree of itching. The exanthematous syphilitic eruptions terminate by resolution or slight exfoliation of the epidermis, but never by ulceration, as some writers pretend.

Vesicular Syphilitic Eruption.

This has been hitherto considered a rare form of the syphilitic cutaneous eruptions. M. Bielt saw but a very few cases of it, one of which is recorded in M. Cazenave's "Manual of Diseases of the Skin," amongst the syphilides. M. Baumès, however, in his recent work ("Nouvelle Dermatologie," &c.) throws out a hint that the rarity of, this form of eruption is more imaginary than real, arising from the circumstance of dermatologists generally admitting no cutaneous diseases to be syphilitic that are not accompanied by the copper-colored areola. He states that he has very distinctly seen this variety of the syphilides, under the form of eczema, characterised by small conical vesicles scattered here and there, and containing a transparent fluid without any change of color in the skin; and in support of this view he relates an interesting case in which a well-marked syphilitic papular eruption was succeeded by an equally distinct eruption of a syphilitic vesicular character without the slightest trace of the pathognomonic copper color. The vesicular groups of *herpes preputialis*, and the superficial excoriations which succeed them, have sometimes been mistaken for a vesicular syphilitic affection, but an error of this kind could not occur to any careful observer. M. Cazenave, in his "Traité des Syphilides,"

already referred to, also entertains the opinion that this variety is by no means so rare as is generally supposed, but owing to its not being so easily distinguished as the other syphilitic eruptions, by unpractised observers, it has hitherto been thought a rare disease. The latter author says that this variety may appear under all the forms of the simple vesicular eruption; thus it sometimes manifests itself by an eruption of round, globose, isolated vesicles of a certain size, as occurs in varicella; sometimes it will appear in the form of small discs or circular groups, as in herpes; in other cases the vesicles appear in greater number, are disposed in irregular clusters, and disseminated as in eczema; and cases have been met with in which the eruption has even assumed the character of eczema impetiginodes. A remarkable case of this kind is recorded by M. Cazenave in the work above mentioned. The vesicular syphilitic eruption may be developed on any part of the body—however, it seldom attacks the face. The neck, chest, and limbs, especially the inferior extremities, are the regions it commonly occupies.

Bullous Syphilitic Eruption.

As the two varieties (*pemphigus* and *rupia*) which represent this species do not appear on the face, it is not necessary to describe their peculiar characters here.

Syphilitic Pustular Eruption.

This is, perhaps, one of the most interesting of the venereal eruptions. The varieties of this species, which occur most frequently on the face, are *acne syphilitica*, *impetigo confluens*, and *ecthyma superficialis*. The first, which is the most common of the pustular syphilides, is also the one most frequently mistaken. It is in reality a papulo-pustular eruption, a pustule being, as it were, engrafted on a papule. It is characterised by distinct isolated pustules, about the size of a small lentil, slightly prominent, scattered over different parts of the face, of a well-marked coppery color, suppurating imperfectly, and terminating in a cicatrix much less in size than the pimple it succeeded. It may appear on all parts of the body, but the eruption is modified in appearance according to the region in which it is developed. When it occurs on the face, forehead, and chest, the pustules are more voluminous, prominent, and rounded; they suppurate to one half of their depth, and are then crowned by a thick incrustation, leaving behind a pretty broad and depressed cicatrix, which reposes for a considerable period on a hard, tuberculated base. When cured in one place they often reappear in another, and are in general difficult to be removed effectually. Their progress is invariably chronic, they never terminate in ulceration, and a small indelible cicatrix always remains after the eruption has disappeared.

Impetigo Confluens is a much more severe disease of the face than the foregoing. The pustules unite or run into each other in numbers, superficial ulcerations ensue, which are followed by broad cicatrices, more or less disseminated and disfiguring the face considerably. M. Cazenave calls this variety the *pustulo-crustaceous* syphilitic eruption. The regions it most frequently attacks are the chest and neck, but more especially the face and forehead. This eruption commences by a red color of the skin, of variable intensity in the parts about to be attacked. This red

color is accompanied by an evident degree of tumefaction, and is presently studded over with purulent deposits which speedily become agglomerated, especially if the surface beneath is much inflamed. Thus the disease is resolved into one or more large patches, surrounded by a broad copper-colored areola, and crowned by slightly prominent incrustations, rugged, greenish, soft to the touch, particularly on their first formation, raised at the centre, and blended at the circumference into a soft inflamed tissue, which indicates approaching ulceration. These incrustations cover greyish superficial ulcerations with slightly raised edges, secreting a sero-purulent fluid, by means of which the scabs are incessantly renewed until the morbid disposition of the parts is arrested or altered; then the scabs become gradually drier, their circumference becomes more firm, and by and by small portions are detached, exposing to view a surface in the state of cicatrisation, and finally falling off altogether, a pretty large cicatrix remains, which is unseemly in proportion as the evolution of fresh crops of pustules is frequent. These various pathological phases are distinctly and consecutively pronounced, and the readiness with which the diseased parts adapt themselves to their new and varying conditions is as singular as it is interesting.

The following highly interesting case, illustrative of this variety, occurred in M. Cazenave's wards at the Hospital of St. Louis, in 1841:—Marie L., aged forty-eight, was admitted into the hospital on the 16th of July, 1841. She possessed a naturally good constitution; she was married at eighteen, and had several healthy children, and the eldest, being then twenty-nine years of age, never suffered from the slightest indisposition. She denied ever having had either chancres or gonorrhœa, but attributes the cause of the eruption she is laboring under to incessant grief for the loss of her husband, who died seven years previous to the date of her admission. After long continued loss of sleep, and the constant flow of tears, she said she began to experience a burning heat in the nostrils and on the right cheek; presently this cheek became red, tumefied, and covered with pustules; the nostrils also became gradually obstructed, and latterly she could only sleep with her mouth open, to prevent suffocation. The following is the appearance of the eruption when she was first seen by M. Cazenave:—On the right side of the face, the whole of the cheek between the inferior eyelid and the upper lip was covered with pustules and impetiginous scabs; the skin was much swollen, and presented a well-marked coppery color; the pustules were surrounded by a distinct copper-colored areola, which was gradually lost in the healthy or natural color of the surrounding skin. At the external angle of the eye, amongst other places, there existed a remarkable looking patch of incrustation, which, from its aspect, its thickness, the reddish brown color of its areola, &c., was clearly of syphilitic origin. New pustules, in various stages of formation, were scattered here and there on the nose, the cheek, and the upper lip. The mucous membrane of the nares and their septum were also attacked, the latter was even partly destroyed by ulceration. The roof of the nose presented an extremely repulsive appearance, and pustules and scabs of various sizes having formed, also, on the in-

ternal surface of this part, projected outwards and downwards in the form of stalactites of a reddish brown color. On the left side of the face, which was also diseased, the eruption did not extend beyond the ala of the nose on that side and its vicinity. Tumefaction of the cutaneous tissue and the peculiar copper color, which diminished as it approached the middle of the cheek until it became finally lost, were the only symptoms here distinctly marked. It was evident, notwithstanding the virtuous protestations of Marie, that this was a syphilitic impetiginous eruption, and, accordingly, M. Cazenave administered the protoioduret of mercury, and otherwise treated it as a venereal affection of the skin. The patient was recovering fast under this method of treatment; cicatrisation was succeeding to all the foul unhealthy looking scabs, and the whole aspect and condition of the eruption was completely modified, when she insisted on leaving the hospital.

Ecthyma Superficialis.—In this form of the syphilitic pustular eruption the pustules are larger, more distinct, indurated at their base, and scab more rapidly than in the preceding varieties. Although the pustules are, as I have observed, generally isolated, it sometimes happens that they are evolved in clusters, in the event of which the scab will be large and thick, and have considerable resemblance to those of the pustulo-crustaceous variety already described. This is a rare occurrence, however, and the incrustations, which are perfectly round, about the size of a shilling, brownish, prominent, raised at the border, and depressed in the centre, will distinguish it at once from the eruption mentioned. The pustules of this form of ecthyma never penetrate into the cutaneous tissue like the deep-seated variety of that eruption. They have a tendency to scab rather than to ulcerate; and when ulceration does take place it is always superficial and is covered by slightly adherent incrustations. When the eruption attacks the forehead and face, as it frequently does, it appears in the form of pretty large sized pustules seated on a copper-colored base, and surrounded by a kind of whitish rim, which marks the termination of a thick, yellowish scab. Several patches appear on the forehead, which are in a short time covered with broad, prominent, greenish scabs; these are raised in some places, depressed in others, and occasionally present a blackish color, irregularly mixed with the green tint mentioned above. Sometimes the pustules are larger than those of impetigo, perfectly round, slightly conical, filled with a thick, yellowish fluid, surrounded by a distinct copper-colored areola, but not seated on an indurated base like other forms of ecthyma superficialis. In these cases the pustules open early, and are crowned by a brownish scab of similar form, of uniform thickness, slightly adherent, and raised at the edges. This form of incrustation invariably reposes on an exceedingly superficial ulceration.

I shall conclude the syphilitic eruptions of the face in my next communication.

29, Margaret-street, Cavendish-square,
February 18, 1843.

REMARKS ON FRACTURES.

By JOHN M. BANNER, Esq.,

Senior Surgeon to the Liverpool Northern Hospital.

[We extract the following judicious remarks from the 154th number of the "Edinburgh Journal."]

The treatment of fractures of the long cylindrical bones is so well understood at the present day, that it is unnecessary to dwell on the mode which has been adopted in the cases under notice. There are, however, certain observations resulting from the treatment of the more severe injuries which appear of importance, emanating, as they do, from a practice of no mean extent. The first great question which naturally presents itself in the treatment of severe fractures is, whether the injury is of such a character as to justify the surgeon in attempting to save the limb. Much rests on this important point. The life of the patient may be lost in attempting to save the limb, or the limb may be unjustifiably amputated. The first examination in such cases is all important. It should be made with great care and patience, and the surgeon should, if possible, fully satisfy himself of its exact nature, so that any future examination may be rendered unnecessary. Difficult as the question is, there are circumstances which, when taken into account, naturally lessen embarrassment. Thus, there are injuries characterised by peculiarities, which, from their known fatal results, point out the unreasonableness of attempting to save the limb, and render amputation, as it were, imperative. Again, there are injuries of a very severe character, wherein the surgeon is justified in attempting to save the limb. In the first class of cases here alluded to, are comprehended severe lacerations of the muscles and tendons, with simple or compound fracture, such as result from machinery, or anything causing much friction; for instance, the coiling of an over-stretched rope round the limb, or severe contusion accompanying the fracture, compound fracture extending into the knee-joint, fracture with laceration of the femoral artery, fracture with severe injury of the large nerves, comminuted compound fracture of the tarsal bones, particularly of the *os calcis* or astragalus. This may be said, also, with regard to the carpal bones when accompanied with laceration of the muscles and tendons, longitudinal fractures of the long cylindrical bones entering a joint, compound fracture of the tibia into the ankle-joint with laceration of the tibial artery; fracture with internal hæmorrhage.

The second class comprehends cases of severe compound, or compound comminuted fractures; compound fracture extending to the ankle-joint; compound fracture, with considerable laceration of the soft parts; fracture, with considerable contusion. It is impossible to enumerate the several cases in which it will be proper to attempt to save the limb, as many circumstances will have to be taken into account.

Those cases which have been mentioned are such as have presented themselves at the Liverpool Northern Hospital. The recorded experience of a long period clearly proves that the injury of bone, abstractedly considered, is not dangerous; and, whatever bad consequences follow, will principally depend either upon the degree of mischief done to the soft parts, or upon

the inflammation of such parts, excited by the same violence that broke the bone, or upon the irritation of them by the spiculæ and sharp projections of the fracture. In short, the danger appears to be in the ratio of the injury done to the soft parts, and this is produced by the manner in which they are affected by the fracture, or the power which has effected the injury.

In determining the momentous question, whether the attempt to save the limb be made or not, several points will have to be taken into consideration, independent of the allusions already made. The age of the individual forms a feature in the case. It has been found that patients whose ages did not exceed thirty have had constitutions capable of bearing the severe shocks arising from these injuries much better than those more advanced in life. Two remarkable instances occurred in boys of ten and fifteen years of age. In one, where there was compound fracture of the tibia and fibula, with extensive laceration into the ankle-joint, the internal and external malleolus came away; the patient recovered with a good leg and foot. The other case was one of compound fracture of the tibia and fibula, with severe laceration and contusion of the muscles and integuments, the foot being literally held by the torn muscles; the integuments having been lacerated over the whole circumference of the leg. This accident was occasioned by a heavy canal boat pressing the leg against the stones forming the side of the canal, while the boat was drawn along by horses, the leg being rolled in its passage. This boy recovered without a single bad symptom. On the other hand, apparently slight injuries occurring in persons of a more advanced age often terminated badly. As an illustration may be mentioned the case of John Joseph, aged sixty-three, who cut his foot with an axe. The cuboid bone was fractured. Traumatic gangrene was the result of the inflammation which followed the accident, and so destructive was its character that amputation was had recourse to to save life. It is unnecessary to instance many cases in exemplification of the fact, that persons above the age of thirty will not bear the same degree of injury as well as those below it, and the higher they advance in years the less power has the constitution to bear the shock occasioned by severe injuries.

The previous habits must exclusively guide the surgeon in his determination. Too much attention cannot be paid to this inquiry. The man who has led a dissipated life can ill support a moderate shock to the constitution; and where it can be ascertained that the previous habits have been bad, the surgeon will not do well to trust too much to nature's reparative powers.

The state of the constitution at the time of the accident should be also ascertained, as this may, likewise, very materially influence the surgeon in his determination.

Whether the superior or the inferior extremity be injured will make considerable difference, as it is well proved that very severe injuries of the upper extremities will do well, when it would be unsafe to attempt to save an inferior extremity, where the same amount of injury had been inflicted.

It seldom happens, where the accident is of so

severe a nature as to demand amputation, that the patient is in a state to bear the immediate performance of it; the depressed state of the vital powers is such as frequently to endanger life. In some instances the patient never rallies, and here a very important question raises itself—namely, as to the most fitting time for the operation. This difficulty continually presents itself in severe injuries to the extremities requiring amputation—whether it be well to operate during the collapse of the patient, or to wait for increased power given to the constitution by reaction, is a point for consideration. In several very urgent cases where there have been but slight indications of reaction or an increase of vital power, amputation has been successful. In these instances, although the operation appeared to give an additional shock to the system, yet reaction almost invariably returned in a short time. In three cases amputation was performed during extreme collapse—cases in which a fatal hæmorrhage was existing, and where the patients, instead of showing any signs of rallying, were gradually becoming more depressed. Two died, one recovered; and one of the patients who died required amputation of both legs. Other cases died from the effects of the shock on the system, where it was considered unjustifiable to amputate.

Many hold the opinion that the knife is a good stimulus in these cases, and that the operation is rather beneficial than otherwise. So far is this from being the case in the instances which have occurred here, that the conclusion arrived at is—that in cases of extreme collapse amputation should not be performed, unless there be hæmorrhage, which, if not arrested, would of itself destroy the patient. Where the sufferer complains of great pain, the chances are more favorable than where there appears an absence of sensibility. There is, perhaps, no worse symptom than a great want of feeling evinced in cases of collapse; it indicates extreme depression of the vital powers, from which the patient rarely recovers.

In severe injuries of the extremities, accompanied by hæmorrhage, and where collapse exists, it were better to amputate immediately than to allow the patient to sink from the loss of blood. There will be a possibility of reaction taking place, and by the operation is given the only remaining chance. In such an instance the operation will be proper. In severe cases, however, where the immediate danger arises from the depression of the vital powers, and where the operation can be delayed, although at considerable risk, amputation ought not to be performed; good cannot result from it. By having recourse to it, the only chance left may be destroyed, as undoubtedly such a step would only increase the depression of the vital powers. It will be more prudent even to risk inflammation and its consequences, than to attempt to amputate where the symptoms of collapse are urgent, unless alarming hæmorrhage is present, and then it may be justifiable, as the only chance left for the patient. It may be contended that hæmorrhage can be restrained; let it be recollected, however, that the symptoms of collapse may, and do frequently, exist many hours. Compression sufficiently decided cannot be kept up for the time required without great additional danger.

Another important point for consideration is the

time at which secondary amputation should be performed. The surgeon not unfrequently experiences the mortification of seeing his best endeavours fail, and the limb, which at the time of accident presented no other than symptoms most favorable to its preservation, rapidly assuming an unfavorable aspect; or the limb, which, in consequence of the urgent symptoms of collapse, could not be amputated in the first instance, speedily inflaming, and if the patient lives long enough, running on to suppuration or traumatic gangrene. The experience derived from the foregoing cases leads to the conclusion, that where the inflammation runs on to suppuration, amputation can be safely performed. The incisions may be made even through the abscess; yet, where this can be avoided, it is highly proper to do so.

When inflammation terminates in traumatic gangrene, amputation may be performed with safety. Cases have occurred where the operation was successfully performed, though the gangrene was extending rapidly, and the patient reduced to the last extremity. So extraordinary have been the recoveries under such circumstances, that the surgeon should never look at the case as hopeless, or neglect to give the patient this chance of life. The same may be said of cases which run on to suppuration, accompanied by urgent symptoms of hectic. Though reduced to the extremest possible danger, yet, on the timely removal of the source of the evil, the patient lives.

It not unfrequently happens, where the patient lives beyond the first stages and dangers of inflammation, that we have to encounter a series of profuse abscesses, of great extent, with hectic disturbance of the most alarming kind, and which can only be arrested by removing the exciting cause. If an attempt has been made to save the limb, and it be frustrated by the formation of extensive abscesses (or by diseased bone, causing frequent returns of inflammation), or by extreme prostration of strength with the urgent symptoms constituting hectic fever, amputation will probably become necessary. The time for such an operation will depend on the reparative powers still remaining. If the strength be too impaired to admit of the delay necessary for exfoliation, amputation must be performed. It seldom appears that the patient is too weak for the operation; nevertheless, where it becomes necessary, it should be done without delay. It is astonishing how much depression and weakness the patient will recover from, when the exciting cause has been removed. This is observed in cases where diseased bone has been thrown off, which, from its irritating presence, had kept up a profuse discharge and urgent symptoms.

It may be mentioned that in some cases of extensive discharge of purulent matter, accompanied by hectic disturbance of the system, much good has been derived from substituting cold spirit wash for warm applications. The diminution in the quantity of discharge has been extraordinary, and not unfrequently has the urgency of the symptoms disappeared after its use. By the beneficial results arising from it, several limbs were saved, which, it was feared, must have been sacrificed to preserve life. The cases alluded to are those in which it becomes a question

as to the power the patient has to contend against the depressing effects of suppuration and irritation; the surgeon feeling satisfied that, if there be sufficient stamina to withstand the effects of the discharge, the patient will recover. Where, however, the injury is of such a character as to preclude the possibility of saving the limb, and amputation becomes a mere question of time, the first favorable opportunity must be embraced for the operation.

CONVULSIONS

DURING

DELIRIUM EBRIOSUM.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In Dr. Lynch's paper on Delirium Ebriosum, accompanied with Epileptiform Convulsions, published in the last number of your Journal, he states it as a curious circumstance that the only cases we can discover "of recovery after epileptiform convulsions are these alluded to in this article," &c. As recovery is confessedly rare, perhaps another instance or two may not be unacceptable; I therefore forward the following cases, which prove that recovery may, and generally I think does, take place when the attack is ushered in by convulsions, accompanied with a strong and full pulse, indicating the propriety of using depletion; and so far from considering them a fatal indication at the commencement, I should be more inclined to the belief that convulsions are not to be viewed as invariably dangerous; it is, however, far otherwise when they come on later or towards the termination of the disease.

On the 5th of April, 1839, I was summoned immediately to see Mrs. B., the wife of a publican, of well-known intemperate habits, whom I found sitting up, or, at least, supported on the sofa, laboring under the most frightful paroxysms of convulsions I ever witnessed; the features were most horribly distorted and dreadfully livid, presenting a most unnatural appearance; upon inquiry from her husband I found, to use his own words, "she had been at her old tricks again;" in fact she had been, for several days, indulging freely in the use of her favorite beverages—porter and brandy. As she was a stout and gross personage I did not hesitate to abstract about sixteen ounces of blood from the arm, which had the effect of quieting the paroxysm. When she rallied a little her eye fell upon her husband, and, suddenly grasping my arm, cried out, "Oh, doctor, there!—there he is, the old devil! Oh, for God's sake! keep him from me—keep him from me—he'll tear me to pieces!" &c., and other such wild and extravagant expressions; this was immediately followed by another attack more severe than the first, so much so as to require several persons to hold and prevent her from inflicting serious injury upon her own person; her tongue, however, was severely bitten, and the bandage torn off the arm, &c. After this she was conveyed to bed, had a mustard plaster to the nape of the neck, and a bolus containing eight grains of calomel, five of camphor, and two of opium, made up with a sufficient quantity of the extract of hyoscyamus; an evaporating lotion was directed to be applied to the head, and hot bottles to the feet, &c. A turpentine

enema with assafoetida and castor oil was immediately thrown up, which had the effect of producing a most copious and flatulent evacuation. The patient had no return of the convulsions, but decided delirium ebriosum set in, which required the repeated use of the calomel, camphor, and opium, in diminished and frequently repeated doses, washed down with an effervescing saline mixture, containing hydrocyanic acid and morphia, the stomach being in a very irritable state. The daily history of the symptoms would only prove tedious; suffice it to say, that on the 8th (the third from the commencement of the attack) I found her up and attending to the duties of her bar, as unconcerned as if nothing had happened. I remonstrated with her on her conduct, stating the danger she had escaped, &c.; she only replied that her "poor mother suffered dreadfully from the same complaint at the time she was born, and that she must always expect to have those nasty convulsions!" I have reason, however, to believe there was no truth in this statement, as she merely made this as an excuse for her intemperance, which few ladies are willing to admit themselves guilty of. I am not aware that she has since had any return of the disease, as her husband has long since given up business, and she has returned to service in a gentleman's family, where, of course, the temptations are not quite so great, besides being obliged to be more guarded in her habits; she never had any children, and had before served most of her life in a nobleman's establishment as housekeeper.

I am, also, occasionally in the habit of attending a respectable tradesman, who indulges very freely in the use of spirituous liquors, and who frequently is attacked with delirium tremens or ebriosum; in his case the attacks are invariably ushered in with convulsions, but not of so violent a nature as in the first case, being more of an universal tremor or shaking of the whole body which continues for several minutes accompanied by complete insensibility, twitching of the mouth, and rolling of the eyes, &c., followed by delirium tremens; this state generally yields to the application of several leeches to the head, a mustard cataplasm to the nape of the neck and pit of the stomach, followed up by full doses of calomel and opium. In the first attacks I used generally to bleed him, but I now trust to leeches, cupping, and cold applications to the head, &c.

I am, Gentlemen,

Your obedient Servant,

WILLIAM GRIFFITH,

Surgeon to the Oswestry Dispensary.

Feb. 14, 1843.

MORTALITY IN FOUNDLING HOSPITALS.

The mortality in the Foundling Hospital at Vienna was at one period 60 per cent.; in the year 1812, as high as 69 per cent. Since then, however, the mortality has gradually fallen; in 1823, only 20 per cent. died; in 1826, only 14 per cent.; in the year 1829, 23 per cent. During the last ten years the mortality never exceeded 20 per cent.—*Ost. Wochen.*, No. 52, 1842.

A GUIDE TO THE URINARY CABINET, &c.

By ROBERT VENABLES, M.B.

This pamphlet is intended as a companion to a "Urinary Cabinet" constructed by Messrs. George Knight and Co. The cabinet contains an apparatus, and all the tests necessary for an elaborate series of experiments on the urine, and represents, on a large scale, the portable case of Mr. Ronketti. The directions furnished by the author of the pamphlet, as a guide to the experimentalist on urinary secretions, are clear and practical, and we think that the following condensed account will serve as an useful article for reference:—

Before we attempt any investigation of the properties of urine in a disordered state, we should make ourselves acquainted with the general appearance and properties of healthy urine, and the re agencies produced by the different tests.

Urine which has a yellow or deep orange-red color indicates a mal-distribution of the bile, and denotes a tendency to, if not actual jaundice. Copper-colored urine, which is or becomes remarkably transparent on cooling, indicates acidity of this excretion, and a tendency to deposit lithic acid in the crystallised form. Citron-colored, or yellowish-green colored, remarkably transparent, with an acidulous reaction, denotes the oxalate of lime diathesis. Pale straw-colored urine, or of a blueish-green tint, and having the smell of new hay, denotes sugar, and the presence of diabetes, in some one or other of its forms. Opalescent oily-looking urine, having a peculiar animal odor, also resembling that of the sweet or wild briar, denotes the cystic oxide diathesis. Pale-colored, wheyish-looking urine, opalescent, when passed, and having a strong peculiar urinous smell, is generally neutral, and soon becomes alkaline; it denotes a tendency to the phosphates. Very clear, colorless, transparent urine, devoid of smell and almost of taste, is generally copious, watery, and of very low specific gravity, showing a tendency to hysteria, and various other nervous affections, as well as spasm. Urine of this sort also often contains a large proportion of the alkalies, mostly carbonated. Urine perfectly transparent when passed, but becoming cloudy as it cools, and finally depositing reddish, yellow, or cream-colored sediments, shows a predominance of lithate of ammonia, and the sediment will readily dissolve on the application of heat. Urine cloudy when passed, and remaining so after filtration, but which, on being heated after the addition of a little acetic acid, becomes opaque, and deposits a solid coagulum, contains albumen in some one or other of its modifications. Urine transparent when warm, but which on cooling deposits a sediment, and being heated becomes again transparent, but on continuing the heat becomes cloudy, and ultimately deposits a coagulum, owes these properties to lithate of ammonia in excess, with albumen. A very slight degree of temperature dissolves the lithate, but it requires a temperature of between 150° or 160° Fah. to coagulate the albumen, the double opalescence, with intervening transparency, arising from the different degrees of temperature. Transparent urine, becoming cloudy on the application of heat, will be found to owe that property to holding

the phosphates, and probably some carbonate of lime in solution by carbonic acid in large excess.

The specific gravity of urine is ascertained by immersing the urinometer, and allowing it to remain in the fluid for a few seconds, when the specific gravity is read off, by inspection of the figures on the stem. The following precautions are essential to accuracy and precision:—The instrument should be perfectly clean, and free from all grease, oily, mucilaginous, saccharine, and saline particles, the adhesion of which affect the delicacy of the instrument. The urine, too, should be free from all bubbles of air, which, by attaching themselves to the instrument, would give it a greater degree of buoyancy, and consequently a false estimate. The temperature also should be taken, and this should be allowed to approach the ordinary standard, say between 50° and 60°, before the specific gravity be finally determined. Urine below 1.010, very copious, clear, and like spring water, infers defective digestion, attended with a cold phlegmatic constitution. Often, too, the alkalies predominate. Copious, pale-colored urine, of specific gravity between 1.015 and 1.020, denotes spasm; indeed, urine copious, like spring water, and of low specific gravity from 1.000 nearly to 1.015, indicates a leucophlegmatic habit, a watery, serous condition of blood, and what would be designated an anæmious condition of the system. Such urine also frequently contains imperfectly elaborated chyle. To these, however, there are some exceptions, which the other conditions of the urine indicate.

Urine of similar properties, but opalescent or wheyish, and neutral, or which speedily becomes alkaline, shows a tendency to the phosphatic diathesis. Phosphatic urine, however, is frequently of much higher gravity—from 1.020 to 1.025—and then frequently abounds in urea. When the specific gravity exceeds 1.018 or 1.020, and the fluid has a deep color, approaching to red, high-colored as it is termed, phlogistic fever, may be considered as habitual, and indigestion, with hepatic derangement, is present. In such instances the alkaline lithates often abound and are deposited. Urine from 1.020 to 1.025 or 30, of an ale or porter color, attended either with diuresis, or with a desire of frequent micturition, indicates excess of urea, a tendency to diabetes, and not unfrequently either hæmorrhoids are troublesome, or the prostate gland is in some degree affected. Urine of a specific gravity of 1.030 (and above more certainly), transparent, of a pale straw-color or blueish green, most unequivocally denotes diabetes, nor does a saline taste alter the facts, for, though saline, sugar may be proved by some of the ordinary methods of search.

The chief mechanical properties of urine are specific gravity and quantity. The former, as has been said, is ascertained by the urinometer, and, if natural, should range between 1.012 and 1.017. The stem of the urinometer is graduated from 0 to 60; and, to understand its application, we should remark that 0 marks the specific gravity of distilled water, and should be read as 1.000; hence the other numbers must be added to 1.000 to express the specific gravity of the fluid examined. Thus, if the surface of the fluid coincide with 35, 40, 43, &c., on the stem of the instrument, the specific gravity of the fluid will be 1.035, 1.040, 1.043, &c.

The specific gravity affords some estimate of the quantity of saline or other principles held in solution by the urine. But as the temperature influences the specific gravity, this should always be determined by means of the thermometer. An elevated temperature, in many instances, reduces the specific gravity of a fluid or solution; but the urine frequently abounds in saline principles, &c., soluble while the urine is hot, but separating as it cools. In such cases, provided the urinometer be used for the purpose, the specific gravity should be taken while the urine is yet hot, and again when it shall have deposited its insoluble salts, and it will often happen that the gravity under these circumstances will differ by some decimals. Therefore the thermometer is essential where accuracy and precision are required.

The ordinary temperature of healthy urine may be estimated at 92° Fah., and the quantity passed in twenty-four hours at from forty to fifty ounces. Having ascertained these sensible properties, we proceed to the chemical examination of the urine, and the first step is to ascertain if it be acid or alkaline. This is readily done by the well-known tests of litmus and turmeric paper.

The excess or deficiency of any of the principles contained in the urine may next be ascertained; but, as a standard of comparison, we must bear in mind the composition of healthy urine. According to the analysis of Berzelius, urine consists of—

Water		933.00
Animal and destructible principles.	Urea	30.10
	Lithic acid	1.00
	Free lactic acid? Lactate of ammonia and animal matters inseparable from the above (osmazome soluble in alcohol; extractive, soluble in water)	17.14
	(Vesical) mucus	0.32
Alkaline and earthy salts.	Sulphate of potass	3.71
	" soda	3.16
	Phosphate of soda	2.94
	" ammonia	1.65
	Muriate of soda (chloride of sodium?)	4.45
	" ammonia (hydrochlorate)	1.50
	Earthy phosphates with a trace of fluuate of lime (fluoride of calcium?)	1.00
	Silex03

We shall take the preceding principles in order, and endeavour to give a brief description of the several processes by which they may be detected. The normal quantity of water is to be determined by the quantity passed in a given time and the specific gravity. If not more than forty ounces of the usual specific gravity be passed in twenty-four hours we may conclude the watery portion to be in the normal proportion.

Urea.—The normal proportion of this principle is about 30½ parts in 1000 parts of urine. But this principle may be unnaturally increased or diminished. When in the normal proportion no crystallisation takes place on the addition of nitric acid, even after a considerable interval; but when urea is in excess, crystallisation takes place very speedily after the addition of nitric acid; and the interval between the addition and the crystallisation may be taken as a tolerably fair index of the excess of urea. To examine

for this principle a small quantity of urine should be placed in one of the glass capsules, and with the dropping tube nearly an equal quantity of nitric acid should be allowed to trickle along the concave surface of the capsule, so as to pass under and float the urine upon its surface. If urea be present in excess, crystallisation will take place more or less speedily, in proportion to the excess. Urine abounding in urea has generally a high specific gravity, from 1.020 to 1.030. Hence, the specific gravity is frequently an indication of an excess of urea.

Urea may be deficient, and this condition is frequently associated with the presence of foreign matters, especially sugar, in the urine. If the watery portion of the urine be increased, the quantity of urea, as well as of the other principles, will be relatively, not positively, reduced. Such cases will be readily distinguished by the reduced specific gravity and increased quantity of the urine. The best method of estimating a real deficiency of urea is either to evaporate the urine at a gentle heat to one-half or two-thirds, then, the quantity of water being reduced, if no crystallisation takes place on the addition of nitric acid, urea may be considered as deficient.

Lactic acid exists in the urine generally in combination with ammonia; but when the urine abounds in other acidulous principles, the lactic acid being separated from its base, attacks the lithic compounds, and, combining with the base, sets the lithic acid free. It may thus become a cause of lithic acid gravel, or of the formation of a lithic acid calculus.

Lactic acid may be detected in various ways, but, as the processes are complex, we must refer the reader to chemical works.

Lithic acid always exists in healthy urine, in combination with ammonia; but its affinities are so weak that, if any dilute acid be added to the fluid, the lithic acid separates mostly in the crystallised form.

Dilute nitric acid decomposes and dissolves lithic acid, with effervescence. The solution, when slowly evaporated, leaves a pink stain, which becomes a rich purple on addition of liquid ammonia. This is the special test of the presence of lithic acid, both free and combined, even when it exists in very minute proportion. One of Griffin's white capsules, in the shape of a teaspoon, answers well for the experiment.

Lithate of ammonia, also, is much more soluble in hot than in cold menstrua. Hence, urine surcharged with lithate of ammonia will preserve its transparency while hot, the lithate being completely soluble at this temperature, but become turbid on cooling, owing to the lithate becoming insoluble, and consequently separating; we recognise, therefore, the alkaline lithates by this peculiar property. The urine, when first passed, is perfectly transparent and free from cloud or sediment; as it cools it becomes cloudy, and ultimately the precipitated lithate of ammonia subsides, leaving the urine clear and cloudless above. A portion of the urine agitated so as to diffuse and suspend the lithate, heated in the capsule over the spirit-lamp, gradually becomes transparent, and the whole of the salt is dissolved, separating again as the urine cools. Indeed the lithic acid may be separated in its characteristic form by the addition of any dilute acid at the temperature of solution. The above properties will distinguish these sediments from

the phosphates, which sometimes subside from diffusion through the urine.

Urine abounding in lithic acid is mostly scanty, high colored, and of considerable specific gravity. It is in general associated with the phlogistic diathesis or inflammatory state of the system.

The lithates are deposited under three different aspects—namely, yellow or cream colored, the red, and the pink. Dr. Prout looks upon the lithic compounds as derived from the albuminous principles of the chyle and blood, as well as from the decomposition of the albuminous textures themselves. Hence, a knowledge of their nature, independently of the information they afford relative to the diseased states of the urine, frequently throws considerable light upon the derangements of the digestive process, and their specific nature.

Mucus.—The bladder and urinary organs are lined, like many others, with a peculiar membrane named mucous, and which secretes a peculiar principle, termed mucus, which serves to protect the part from the irritant action of the fluids either contained or transmitted. This mucus in the healthy state is so small in quantity that it has little or no effect upon the appearance of the urine. After rest, however, it is often observed to have subsided, either occupying the bottom of the vessel or remaining suspended as a mass at different depths. It is not an object of any importance unless it have become excessive in quantity, or vitiated in quality—circumstances to be noted hereafter.

Potass and Soda.—To determine the excess of the two fixed alkalies, the best plan is to convert them into *chlorides* by a solution of neutral chloride of barium. Insoluble salts of baryta will be formed, from which the alkaline chlorides may be separated by mere decanting or filtration. On concentrating the solution, the potass may be precipitated by excess of tartaric acid and its quantity be thus estimated. The chloride of sodium may be obtained by subsequent evaporation.

When greater accuracy is necessary, the compound solution of the mixed chlorides may be evaporated and then exposed to the action of spirits of wine containing about 60 per cent. of alcohol. The chloride of sodium will be dissolved out, and its quantity estimated by evaporation; the chloride of potassium may be dissolved, and precipitated by tartaric acid as before.

Ammonia exists naturally in the urine in combination with phosphoric, and also with hydrochloric acid. The proportions 3.15 in 1000. Sometimes, however, its quantity is morbidly increased, and it enters into the formation of some species of calculi. It also is found as carbonate, derived, in fact, from the decomposition of urea, which is readily converted into carbonate of ammonia by the fixed alkalies, which are found in diseased mucus.

Alkaline urine generally indicates a tendency to deposit the phosphates, which it does by neutralising the excess of phosphoric acid by which the earths are rendered soluble. It also indicates frequently a diseased condition of bladder, at least of its mucous coat. When a large quantity of mucus is secreted, and this vitiated in quality, the urine is often highly alkaline when voided, turning turmeric deeply brown; but

should it not be so, or only neutral, it very speedily becomes alkaline, exhales a strong ammoniacal odor, and very soon becomes putrid; the specific gravity of such urine is also very various; the urine is often very abundant, opalescent, or sometimes clear, like water. In some cases the specific gravity hardly exceeds that of distilled water; in other cases it amounts to 1.020 or 1.030.

Lime.—Sometimes the quantity of phosphate of lime is increased, or at least the earthy base, when it is found also in combination with other acids, especially the oxalic. Phosphate of lime often forms prostatic concretions, and is also occasionally thrown off, together with the carbonate, from the mucous coating of the bladder.

The quantity of lime in solution may be rendered evident by adding to a portion of the urine a little acetic acid, and afterwards the oxalate of ammonia. The oxalic acid will precipitate the lime as oxalate of lime, and the proportion may be thus readily inferred, by comparing the bulk of the precipitate with the volume of urine used. The addition of acetic acid previously precipitates any lithic acid, if it exist, and the oxalate of ammonia should be added to the decanted or filtered portions. The oxalate of lime precipitates as a white flocculent powder, which by boiling becomes heavy and granular.

Magnesia, when present, precipitates with the oxalic acid as oxalate of magnesia; but if there be much hydrochlorate of ammonia in the solution, the magnesia will not precipitate, because it is soluble in hydrochlorate of ammonia. We, therefore, filter from the oxalate of lime, and precipitate the filtered liquor by carbonate of potass and boiling; carbonate of magnesia will be formed, and will precipitate. These precipitates may be ignited, and the quantity of pure earths thus accurately ascertained; but it is seldom necessary, for practical purposes, to proceed so far.

Tolerably fair estimates of the quantity of earthy bases may be more hastily effected by adding liquor potassæ, which will precipitate them as neutral phosphates; or if liquor ammoniæ be added, the ammonio, or the mixed and fusible phosphates, will be thrown down, which, fused before the blow-pipe, will, by the weight of the bead compared with the volume of urine from which it was obtained, enable us to judge with quite enough precision of the quantity of the earthy bases present in the specimen.

Hydrochloric Acid.—This acid exists combined with ammonia, in the proportion of 1.5 to 1000 parts of urine. We have also 4.45 of chloride of sodium, making in all nearly six parts of the saline compounds of chlorine in 1000 parts of urine. To separate the hydrochloric acid, all that is necessary is to add nitrate of silver, when we shall precipitate the hydrochloric acid as an insoluble chloride. To insure complete accuracy, however, some precautions are necessary. If the urine be alkaline, especially ammoniacal, acetic, or perhaps, preferably, nitric acid in slight excess should be added, otherwise the ammonia would hold the chloride in solution. A little organic matter is precipitated by the oxide of silver, but this is easily got rid of by heating in a Berlin crucible, and treating the residue with a little nitric acid, and washing in distilled water. The insoluble residue will be chloride of silver.

Sulphuric acid may be precipitated by acidulous nitrate of baryta; an insoluble sulphate of the earth will fall down, which may be washed with diluted nitric acid, and afterwards exposed to heat. The weight of the dried mass will afford the means of determining the precise quantity of sulphuric acid.

The acids are of importance, inasmuch as if free, they cause a liberation of lithic acid; and, indeed, a predominance of some of the acids indicates particular diatheses. Thus the predominance of the muriatic acid seems in general to denote a phlogistic or inflammatory state of system, while that of the lactic marks rather a state of irritation.

Foreign Principles.—The foreign principles occasionally found in urine are stated by Dr. Prout to be as follows:—

Separately { Albumen
or { Fibrin } Of the chyle and blood.
as blood { Red particles }

{ Various acids, coloring matters, &c., either formed
from, or accompanying the lithic acid.

{ Nitric acid.

Xanthic oxide.

Cystic oxide.

{ Sugar.

{ Oxalic acid.

{ Carbonic acid.

Hippuric acid? Benzoic acid?

Prussian blue; Cyanourine; indigo.

Secretion of the prostate gland, &c.

Pus, and perhaps other matter.

We shall examine the above in their order of enumeration.

Blood itself as a whole requires little or no comment; it will be easily recognised by its sensible characters.

Albumen is sometimes in considerable quantity in the urine, insomuch that on being heated it forms almost a solid opaque mass. The addition of nitric acid likewise causes coagulation, especially if assisted by the application of heat. But urine abounding in chyle also coagulates under similar circumstances. When the urine contains coagulable matter in small quantity, the best test is the prussiate—ferro-sesquicyanide of potassium. The urine should be rendered slightly acidulous by a drop or two of acetic acid, and the solution of the prussiate then added. If the urine contain either serum or chyle, a cloud more or less dense and opaque will speedily form and gradually subside.

Serum and chyle seem to coagulate with different degrees of density. When albumen is the coagulable matter, the mass is more solid and tough, whereas chyle affords a more *curdy* light, and, as it were, flocculent precipitate.

An albuminous state frequently prevails after some of the exanthemata, especially scarlet fever. It also prevails in some forms of dropsy, and denotes granular degeneration of the kidneys. Indeed, chylo-albuminous urine is of great moment, inasmuch as denoting certain morbid states of kidney, which it is of importance to recognise.

Fibrin, *xanthic*, and *cystic* oxides exist chiefly in the form of calculi, and *nitric acid* is of little importance.

Sugar is a principle found in certain diseased states of urine, and especially in diabetes, to which condition the term should be confined. Sugar when in

large proportion is known by the sweet taste which it gives to the urine. The specific gravity of saccharine urine is for the most part high; above 1.030.

When sugar is in very small quantity, or that its sensible properties—the sweet taste, for instance—are masked by other matters, then some manipulation becomes necessary to determine the presence or absence of this principle. The urine may be evaporated to dryness, and the extract hardened by continued desiccation. The hard mass treated first with cold alcohol, and afterwards with boiling, which last dissolves the sugar, on evaporation will yield solid sugar.

Diabetic urine also undergoes vinous fermentation; if, therefore, a little yeast be added to diabetic urine, and the temperature favorable, carbonic acid may be disengaged, and alcohol may be distilled or obtained by other well-known processes from the residue.

Runge proposes the following, as both precise and delicate:—The suspected urine is to be evaporated at a very moderate heat to dryness; upon the dry residue, in a porcelain dish or plate, drop sulphuric acid diluted with from six to eight parts of water. If sugar be present, the mass acquires a dark or even black color. Previously, however, it will be proper to free the specimen by adding a solution of acetate of lead, filtering and precipitating the excess of lead by hydro-sulphuric acid gas, and then boiling. The sulphuric acid may now be applied as above directed with much greater certainty.*

Carbonic acid.—This acid is often found in the urine, both in excess and in combination with the alkalis. It is readily disengaged, either by heating the urine or by adding a stronger acid. It may be separated and received over water or mercury. This acid, also, enters into combination with the lime, forming solid urinary concretions of the carbonate of this earth.

Pus.—There is great difficulty in distinguishing pus from diseased mucus.

Bile in urine may be detected by hydrochloric or (still better) by nitric acid, which strikes a green color with urine containing bile.

HERPETIC PRURITUS.

In a very severe case of this obstinate disease which had tormented the patient for twelve years, and occupied the perineum, scrotum, and inner side of the thigh, M. Baroch had recourse to the following treatment with success:—

Iodine, fifteen grains; hydriodate of potass, forty grains; dissolve in five ounces of distilled water, and add spirits of wine, one ounce.

This solution was applied for a few hours, and produced a sensation of burning; the patient was soon relieved, and, with the aid of baths, was cured in three weeks.—*Oest. Med. Wochen.*

* To pass a current of sulphuretted hydrogen, pour a sufficient quantity of the mixture of iron and sulphur from the bottle into the two-necked bottle, add as much water as will form a stiffish paste, and set by in a warm place for two hours. If one part of sulphuric acid, diluted with four or five of water, be poured upon the mass, sulphuretted hydrogen will be generated in abundance, and by the conducting tube may be passed through any fluid.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, FEBRUARY 25, 1843.

The fourth annual report of the registrar general, which has just been published, contains, as usual, a quantity of interesting and curious information. In the appendix are three papers from the pen of Mr. Farr; one relative to the geometrical increase of the population; a second, illustrative of Mr. Farr's statistical nosology; and a third, on the state of the public health during the year 1840. From this latter we shall select such particulars as seem to be most worthy of record.

The mortality from all causes during the year 1840 was higher than it was in 1838, and considerably higher than in 1839. Thus, in 1838 the mortality amounted to 342,529; in 1839, to 338,979; and in 1840, to 359,561; or, to take another mode of illustration, out of 1,000,000 persons living in 1839 only 21,856 individuals died, while, in 1840, out of the same number living, 22,878 perished. The excess of deaths in the year 1840 over the mortality of the preceding year amounted to 1,022; and of the latter, 626 deaths were produced by epidemic diseases; the remaining 396 deaths were distributed over all the classes, except that of violent deaths, which has somewhat diminished within the last two years, embracing in 1838, 816 deaths; in 1839, 792; and in 1840 only 775.

The following table exhibits the mortality in the several quarters of the years alluded to, and, if compared with the mean temperature of the corresponding quarters, is highly instructive:—

Quarter ending		June 31.	Sept. 30.	Dec. 31.
1838	. 98,114	90,810	72,791	80,816
1839	. 89,739	87,965	76,280	84,995
1840	. 98,843	90,339	80,820	89,630

MEAN TEMPERATURE.				
1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	
1838 . 37°	53°	61°	45°	
1839 . 40°	52°	61°	46°	
1840 . 39°	55°	62°	46°	

Amongst epidemic diseases, the most fatal and widely spread are typhus fever, small-pox, and the three diseases almost peculiar to childhood—viz., measles, scarlatina, and whooping-cough. The deaths from typhus fever are still extremely numerous; they amounted, during the course of the year, to 17,177; in 1838 the mortality occasioned by this disease was 18,775; in 1839 it amounted to 15,666.

Small-pox still continues to prevail in an epidemic manner, and sacrifices its tens of thousands; in the year 1838, no less than 16,268 persons fell victims to this dreadful malady; in 1839, the number of deaths decreased to 9,131; in 1840, there was a slight aug-

mentation to 10,434. It is impossible to contemplate the fact that 10,000 persons have been destroyed by small-pox in this country, and during the course of one short year, without some feeling of indignation that human life should be thus carelessly and recklessly sacrificed. This is not one of those cases in which the skill of the physician is baffled by the violence of disease or want of efficacy in his art; medical science has, in this instance at least, triumphed over the destroyer, and converted a deadly disease into a mild and harmless malady. The experiments performed on the Prussian army for the last six years demonstrate that small-pox may be eradicated from a large community. With sufficient care the disease might be kept under control in this country, if not banished from it; yet, from motives of paltry economy, the pestilence is allowed to stalk abroad, while boards of guardians and poor-law commissioners are disputing whether the preservation of a fellow creature's life be worth sixpence or a shilling.

The reigning epidemic of the year 1840 was scarlatina; indeed, this severe disease has been progressively on the increase for the last three years. In 1838, it destroyed 5,802 persons; in 1839, 10,325; and in 1840 the mortality was augmented to 19,816. The epidemic was most destructive in the North Western, North Midland, York, Welsh, and Northern districts. In Lancashire and Cheshire the annual mortality from scarlatina was 2.5 in the 1,000, and as the disease prevails chiefly amongst children, the mortality of the infant population must have been exceedingly high.

Diseases of the nervous system do not seem to be on the increase, at least if we may judge from the amount of mortality which they occasion. In several instances the returns for 1838 and 1840 afford examples of almost perfect coincidence. Thus, the deaths from chorea in 1838 are stated at 24; in 1840 they amounted to 25. Epilepsy destroyed 1,093 individuals in 1838; and in 1840, 1,098 persons died of the same disease. The deaths from insanity were—in 1838, 367; in 1840, 368. Delirium tremens is, we regret to see, on the increase, the respective mortality for the three years being 182, 206, and 233. The general mortality from diseases of the nervous system varies but slightly from one year to another; our increased knowledge of disease has contributed little to diminish the mortality of this fatal class of affections; in 1838, it was as .003365 in the 1,000,000; in 1839, as .003255; and in 1840, as .003302.

The deaths occasioned by diseases of the respiratory organs are about double those arising from affections of the nervous system; they were, for each of the years just mentioned, .006149, .005989, and .006043. The mortality from consumption during the same period was 59,025, 59,559, and 59,923. About 4 in every 1,000 persons died annually of consump-

tion, and about one-fifth or one-sixth of the total deaths was produced by this disease.

The mortality from diseases of the urinary organs was .000112, .000101, and .000110 in the three years. The deaths from stone and gravel were 320, 299, and 303; the mortality being .000022, .000020, and .000020. About 1 in 50,000 persons die annually of stone, and, as Mr. Farr observes, it will be interesting to observe whether the mortality of this disease be reduced in future years by the progress of medical science.

The mortality of women in childbed increased from 190 to 193 and 195 in the 1,000,000; and one woman died for about every 187 children that were born alive. It is difficult to account for this sacrifice of female life at this interesting and important period; we fear that it occurs chiefly amongst the poorer classes of society, and we sincerely join Mr. Farr in the question, "Whether the education of the nurses who attend the poor in labor may not be improved?"

We shall take up, in another article, the interesting observations of Mr. Farr on the increase of population.

REVIEWS.

A System of Practical Surgery. By WILLIAM FERGUSSON, F.R.S.E., &c. London: Churchill, 1842. 8vo. pp. 596.

The profession is much indebted to Mr. Fergusson for the production of this elegant and useful volume—more so, perhaps, than they are aware. The obligation, we repeat, is great; for when an hospital surgeon and an university professor condescends to manufacture a manual for students, illustrated after the manner of the "London News," we are as much beholden to him as we would be to Moore, if he were to write rhymes for the royal nursery, or to Landseer, were he to paint a sign-board for the "Bull and Mouth."

The aim of the author is evidently to be useful in an humble way, and for this abnegation of self he deserves the greater credit, seeing that we live in times when the commonplace efforts of puny minds are ostentatiously put forth as claims to literary fame and professional eminence.

The "System of Practical Surgery" of Mr. Fergusson is not a system of surgery at all; the title of the work is a misnomer; it is a system of operative surgery, interspersed with remarks on the practice of the art, and preceded by an introduction, devoted to what may be called elementary surgery.

The arrangement of the system is rather peculiar, for the author, like all great men, has a "system" of his own. It is divided into five parts. The first, or introductory part, contains a brief and imperfect history of the elements of practical surgery; the second part is devoted to an account of operations performed on the superior extremity, and this part includes (we suppose on the principle of transposition of organs) a description of excision of the mamma;

Part III. contains a history of operations performed on the lower extremity; Part IV., those applied to the head and neck; and Part V., such operations as are commonly required for injuries or diseases affecting the chest, abdomen, and pelvis. Under each part we have chapters devoted to dislocations, fractures, ligatures of arteries, and the special operations connected with the region of the body, to which the part is appropriated.

The arrangement of matter in each part is simple and judicious; as an example, we shall take part II., devoted to "the superior extremity." The author first describes the surgical anatomy of the extremity in a very clear manner, and in a way best calculated to impress important practical points on the mind and memory of the surgeon. These preliminary anatomical dissertations appear to us to be the best portion of the work; to render them complete the only thing which we miss is an account of abnormal distributions of the blood vessels. Mr. Fergusson might easily have found all that he wanted on this point in the works of Barclay, Velpeau, or Hargrave; but his reading appears to be of a confined description, if we may judge from his citations, which are chiefly derived from a couple of journals.

Having described the surgical anatomy of the upper extremity the author passes to dislocations, and under this latter head gives an accurate, but necessarily brief, account of dislocations, as they occur in the fingers, wrist, elbow, and shoulder joints, and clavicle. Each form of dislocation is illustrated by a highly finished wood-cut. After dislocations come fractures; then ligature of the arteries of the forearm; then chapters on venesection, excision of the mamma, excision of the different articular surfaces; and, finally, a chapter on the various amputations, which are performed on the upper extremity.

This method is followed throughout the rest of the work, the different operations being arranged according to the regions of the body on which they are performed.

The task which Mr. Fergusson undertook in the preparation of the present manual did not demand any great exercise of professional knowledge or literary research; the path of operative surgery is a beaten one, and all that we could demand from any writer on so hacknied a subject was accuracy of detail and clearness of description. That Mr. Fergusson has ably acquitted himself in both these particulars we freely bear testimony; his "system" forms an excellent guide to the student and junior practitioner; and we know of no other book which has issued from the medical press for many years more likely to become a popular and standard work.

We cannot conclude this brief notice without bestowing a word or two on what is called the "getting up" of this volume. As the Germans say, paper and print are of the most beautiful description. Indeed, no one is more distinguished for the elegance and *recherché* style of his publications than Mr. Churchill. There is a dandyism about them quite peculiar to Princes-street, and which entitles Mr.

Churchill to be regarded as the D'Orsay of medical publishers. Nor should the merits of Mr. Bagg be forgotten. He has contributed 246 illustrations of exquisite finish. Well, indeed, would it be, for patients and their surgeons too, if half the jaws and new noses partook of a tithe of the beauty with which Bagg here delineates them. They are like restorations from the antique. Bagg is, in truth, the "Phiz" of medical literature.

SHEFFIELD MEDICAL SOCIETY.

February 9, 1843.

Sir A. J. KNIGHT in the Chair.

SOFTENING OF THE STOMACH.

Dr. Favell introduced the particulars of a case of softening and erosion of the stomach, which he had had the opportunity of witnessing some time previously.

The subject of the affection was a child, twelve months' old, which had died very suddenly. According to the statement of the parents, the child had enjoyed very good health from the period of its birth. The body was extremely well developed, and the process of nutrition had evidently been perfectly carried on. A day or two before death the child did not appear to be in its usual health and spirits, but was not so much indisposed as to induce the parents to send for their medical attendant. A little medicine, however, was procured from the druggist's, and the child soon appeared to be well again. On the Saturday evening it was put to bed about ten o'clock, and seemed to ail nothing. It slept well and naturally, but between twelve and one the mother awoke, and found the child dead by her side.

The body was examined, by order of the coroner, two days afterwards. Externally there was no appearance worthy of note; not the slightest appearance of decomposition; the brain and its membranes were natural, the former slightly congested. The only departure from a healthy state of the thoracic viscera was the unclosed condition of the foramen ovale. When the abdominal cavity was opened, the liver, intestines, spleen, &c., were all natural; but on proceeding to remove the stomach, it was found that the cardiac extremity had a large aperture in it, and was so extremely soft as not to bear the slightest degree of handling. When the viscus was removed, it was incapable of sustaining its own weight; in fact, the cardiac portion of it was a soft gelatinous mass. The lining membrane of the other portions of the stomach was quite normal. In some subsequent remarks, Dr. Favell referred to the two kinds of softening described by Cruveilhier—the gelatiniform and the pulsatous, the former of which is usually preceded by symptoms of gastric irritation. He was of opinion, however, that the abnormal state of the stomach in the case just detailed was altogether post-mortem. He maintained that the perfect nutrition and healthy development of the child were sufficient evidence that it had not labored under chronic disease of the organs concerned in digestion, whilst it had never had any symptoms of acute mischief. The erosion had certainly not occurred during life, because

there was no sudden expression of suffering on the part of the child, and not the slightest inflammatory blush on the peritoneum.

The author afterwards proceeded to notice the various theories which have been advanced to account for softening and erosion of the stomach, and dwelt particularly on the opinions of Hunter, Gairdner, Jøger, Carswell, and Dr. Inlach. He stated it to be his own conviction that the abnormal condition of the viscus is attributable to the action of the gastric juice.

With respect to the cause of death, Dr. F. was disposed to refer it to some sudden irregularity in the circulation, favored, but probably not induced, by the patent condition of the foramen ovale.

BIRMINGHAM PATHOLOGICAL SOCIETY.

January 7, 1843.

JAMES RUSSELL, Esq., in the Chair.

The report of the secretaries and treasurer for 1842 was read and adopted by the society, and ordered to be printed.

Dr. Fletcher introduced a specimen of true polypus of the heart, the particulars of which he did not wish to be entered upon the minutes, or published at present.

Dr. Fletcher then brought before the society a man, aged thirty-four, affected with congenital malformation of the urinary and genital organs—absence of the inferior parieties of the abdomen and the anterior part of the bladder, exposing the posterior red mucous membrane, with the ureters terminating upon it—absence of the corpora cavernosa, with the ureter split all along superiorly, through the corpus spongiosum and glans penis. He married eight years since, and has connection, at which time the corpus spongiosum and glans measure about four inches, and the ejection of semen takes place from the upper part of its root. His wife has no children. He has no navel, and the origin of this malformation appears to have been in some degree connected with the malformation of the urachus and umbilical cord.

Dr. F. then exhibited a drawing of the same malformation in a child, which is now six years old.

ANATOMICAL SOCIETY OF EDINBURGH.

December 20, 1842.

ANEURYSM OF AORTA BURSTING INTO PERICARDIUM.

Mr. Spence exhibited an aneurysm of the ascending aorta, the size of a small orange, which had burst into the pericardium by an ulcerated opening, about a line in diameter. The patient, a female, aged forty-five, had suffered, some months before her death, an attack of pericarditis. She was in her ordinary state of health on the morning of the day on which death took place, which occurred suddenly.

OBLITERATION OF THE LARGE VENOUS TRUNKS.

Dr. Peacock exhibited two preparations illustrative of obliteration of the large venous trunks.

The first preparation, showing complete obliteration of the vena cava inferior, was obtained from the body of a female, forty-seven years of age, who died laboring under general dropsy and hæmatemesis. On ex-

amination, the lower extremities were found very œdematous; the left lung was diminished in volume and bound down by fibro-cartilaginous adhesions; the heart was healthy; the liver was small and covered with a net-work of dilated veins, which also ramified upon the abdominal surface of the diaphragm; the kidneys were atrophied and in an advanced stage of granular degeneration; the veins in the substance of the uterus and in the broad ligaments were distended by hard decolorised coagula, and the same were found in the iliac veins, and could be traced in the vena cava as far as the sulcus hepatis. At this point the trunk of the vessel was rendered impervious, and converted into a hard white cord of about the thickness of the little finger. The coats of the vein and its different branches were thicker and firmer than natural, and its canal was throughout contracted. The clots were regularly laminated, somewhat resembling the fibrinous layers of an aneurysm, and adhered to the sides of the vessel. The coats of the vein became gradually thicker as it advanced towards the heart till the two sides entirely adhered. The obstructed portion extended from the point of entrance of the hepatic veins to immediately below the right auricle. The vena azygos, as well as the lumbar and spinal veins, were greatly distended; these appeared to have been the channel by which the circulation was maintained. From the net-work of dilated veins which existed on the liver and diaphragm, Dr. Peacock conceived that the portal system assisted in facilitating the backward flow of the blood. There was no enlargement of the abdominal veins.

The second preparation exhibited an obstruction of the iliac and femoral veins. It was taken from the body of an aged female who died of diseased kidneys, and who presented symptoms of phlebitis a month before her death.

Dr. Peacock remarked that obstruction in the veins might arise from three sources—1st, inflammation of the vascular walls; 2ndly, pressure from tumors; and 3rdly, stagnation or retardation of the circulation. The two preparations he had exhibited were, in his opinion, illustrative of obstruction by inflammation of the vascular coats.

January 11, 1843.

CALCULUS IN THE KIDNEY.

Dr. Peacock exhibited a kidney, in the pelvis of which a calculus was impacted. The patient, a female, twenty-three years of age, labored under diarrhœa and involuntary discharge of urine, sometimes containing small masses of cretaceous matter. Delirium and coma preceded death. On examination, all the viscera were found healthy, with the exception of the left kidney, which adhered firmly to the spleen, pancreas, and colon. In the latter, a short distance above the sigmoid flexure, was an opening the size of a pea, which communicated with the substance of the kidney; this organ consisted of little else than large sacs filled with pus. In the pelvis a calculus was found, which projected by three branches into the openings of the calyces. The ureter was much thickened, the bladder contracted, and its mucous membrane covered by a thick layer of cretaceous matter.

OBLETION OF THE CIRCLE OF WILLIS, AND ATROPHY OF ONE OPTIC NERVE.

Dr. Peacock exhibited an obliteration of the arte-

ries forming the circle of Willis. It was taken from the body of a soldier, aged seventy-four, who, on the morning previous to his death, had a severe attack of rigors, followed by headache. During the night he was seized with convulsions, affecting the muscles of the face and extremities; coma succeeded, and death took place eleven hours after the convulsive attack. On examination, the substance of the brain was found healthy; the left vertebral artery contained a peculiar mass, which entirely closed its canal; and the right cerebral, the basilar, upper portions of the vertebral, and the whole of the smaller branches to their ultimate ramifications, were filled with dark clots, and felt rigid when compressed. This man, forty years previous to his death, had lost an eye in Egypt, and on examination, an atrophy of the optic nerve leading to the affected orbit was very distinct, it being only one-quarter the diameter of the nerve on the sound side. No atrophy could be perceived in the course of the nerve beyond the commissure. — *Edinburgh Monthly Journal*, February, 1843.

ROYAL MEDICO-BOTANICAL SOCIETY.

February 22, 1843.

EARL STANHOPE in the Chair.

INDIAN HEMP.

A communication from Mr. Ley on the *Cannabis Indica* was read, from which it appears that, although the hemp is rejected from our official preparations in England, it is, and has been for a long series of years, in constant use as a popular remedy all over the East. It exhales a powerful narcotic odor, and the branches are glutinous to the touch with a resinous secretion, which is collected, when the seed is formed (as the plant is then in the greatest perfection), and is sold under the name of *churrus*; or the shoots from which the resin has not been collected, are cut, dried, and sold as *gunjah*.

Although hemp is no longer used medicinally in England, there is an old act of Henry the Eighth yet in force, by which it is forbidden to be soaked in ponds or running streams where cattle drink. The older writers speak of it as a violent poison, and state that the water in which it has been soaked produces its effects almost as soon as drank.

The resin of the *cannabis indica* is in general use as an intoxicating agent from the furthest confines of India to Algiers. If the resin be swallowed, almost invariably the inebriation is of the most cheerful kind, causing the person to sing and dance, to eat food with great relish, and to seek aphrodisiac enjoyment. The intoxication lasts about three hours, when sleep supervenes; it is not followed by nausea or sickness, nor by any symptom, save slight giddiness, worth recording. These effects are much modified in this country, and much less marked, possibly from the length of the voyage rendering the article deteriorated in value. The subsequent effects are, depression of spirits and relaxation of the muscles in a remarkable degree; yet the litherness attending that relaxation, the free perspiration on the skin, and the increase of appetite, have made some old rheumatic persons speak of it as of the elasticity of youth.

Mr. Ley draws a comparison between the effects

produced by opium and those caused by the cannabis indica, the result of which induces him to give the preference to the latter, its influence being exerted more kindly and more gratefully on the system. It has proved of service in cholera and rheumatism, but it is in spasmodic and convulsive diseases that it is most eminently useful. In tetanus it has been the means of cure in the majority of cases both in men and horses, and it has also relieved much of the severity of hydrophobia, although it did not arrest the fatal termination. It is useful, also, in chorea, spasmodic asthma, and delirium tremens, and generally wherever opium is indicated. Mr. Ley considers further that it will prove a direct antidote—the first of its class—to strychnia, one of the most violent poisons nature affords.

Dr. O'Shaughnessy stated that he felt more embarrassed in addressing the meeting than he had ever done on any previous occasion, from the exceeding kindness with which he had been received by the noble president and the members of the society. He felt himself more than repaid for all his exertions, and for all he had been able to do in the East, by the honor which had been conferred on him in presenting him with the diploma of corresponding member, and he begged to assure the society that, when he returned to India, he would exert himself to the utmost to further the objects and promote the views of the high and learned society he was addressing.

He had had great gratification in hearing the paper which had just been read. Mr. Ley had kindly offered him the opportunity of perusing it before it was sent to the society, but this he had declined, as it might have occurred to him to make some suggestions, and thus unconsciously identify himself with it. He had wished to keep himself clear from this, and he was glad he had done so, for the essay had corroborated in all essential points what he had previously stated. There were certain minor differences between them, but they only tended to show that each observer had used his own eyes, and remarked for himself, not depending on the statements made by others. It was a subject of the greatest importance, and he had been led to investigate it by observing that tens of thousands of persons in the East were constantly producing the most extraordinary effects on themselves by its use in a popular form, and he thought that an article so exceedingly potent must be possessed of medicinal virtues also. As a paid servant of the government, he considered it his duty to examine its properties, and consequently he instituted a series of experiments on animals, and having satisfied himself so far, he then proceeded to administer it to man, and, from the results, was enabled to come to the conclusion that hemp is a powerful and valuable narcotic, capable of producing effects which no other narcotic can produce. He was ready to admit the proneness to self-deception of all experimentalists, nor did he consider himself at all free from it, but his experiments were made and carried on before numerous witnesses, whose presence guaranteed their fidelity and truth, which were further proved by the fact that they were in strict accordance with the effects produced on persons who were in the habit of employing it for the purposes popularly attributed to it, and which he had noted previously to experimenting with it medicinally.

Since his return from India, several medical men, among whom he might mention Dr. Clendinning and Mr. Perry, had tried the drug, and by their report had confirmed the results he had come to as to its great antispasmodic qualities. When he first wrote an account of the cannabis indica, he had been charged with bringing it forwards as a specific for tetanus, but this he had not done; he had not committed such an act of folly; when he wrote, he had stated, as was the fact, that of eleven persons affected with tetanus and treated with the hemp, six had recovered; of five horses laboring under traumatic tetanus, and so treated, four had recovered. From numerical facts, therefore, he had felt himself warranted in stating his belief that, if administered early in the disease, it would tend to arrest its progress. He had had that very day placed in his hands a new part of the Transactions of the Medical Society of Bombay, which contained a communication by Surgeon A. Graham, of the Bombay Medical Establishment, a gentleman altogether unknown to him, who detailed therein two cases of traumatic tetanus, treated in the Native General Hospital at Bombay, one of which, from having come late under notice, terminated fatally; the other, which was taken earlier, recovering. The fatal case, however, was stripped of much of its horrors and sufferings by the use of the remedy. Forty grains was the average daily dose of the resin in these cases, and in one of them the patient was kept in a state of stupor for several successive days. Mr. Graham concludes by declaring his belief that the hemp resin possesses sedative, anodyne, and antispasmodic properties.

Before sitting down he would mention a few experiments which he had made, and which had not yet been published. He would now mention them, because they were within the reach of every one, and could readily be repeated. There is a large class of poisons, the strychnia poisons, by the introduction of which into the system, tetanus can be produced in its purest form, and the affection can be so modified by attention to the administration of the poison as to cause its chronicity, so that it may continue for a few days before it destroys life. If he is right, then, in stating that he has found a remedy for tetanus, let it be tested by producing the disease in animals, and removing it, if possible, by the drug. The experiments which he has made on this subject, and which he brought forward with diffidence and distrust, entreating the society to repeat them and judge for itself, were made in the presence of many witnesses.

Eight dogs were selected as the subjects of the experiments; to two were administered three-grain doses of the alcoholic extract of the nux vomica bark, by which they were killed in three hours. To the remaining six animals the same dose of the nux vomica bark extract was given, which was followed within half an hour by the exhibition of half a drachm of the resin of hemp. Not one of these dogs died; all escaped, and he inferred from this that he derived a great corroboration of his statement that the hemp is of value in the treatment of spasmodic diseases.

In conclusion, Dr. O'Shaughnessy requested the co-operation of the Royal Medico-Botanical Society in testing the properties of this drug, and he felt assured that the task would be undertaken and carried

out to the fullest extent, as a zeal existed there which he had not met with in other societies.

Mr. Ley said that there were two or three points with respect to the preparations which should be mentioned, in order that they may be understood. The first quantity he had been enabled to obtain was about thirty grains of the extract, made at Calcutta, and the effects produced by it were so remarkable that he endeavoured to procure more to continue his investigations. He next received some alcoholic extract, prepared by Mr. Squire from the gunjah, but this he did not find so extraordinary in its effects, although it was still very serviceable, and he had used it largely. When his stock was exhausted (and he believed he had used nearly all Mr. Squire had prepared), another extract was made by Mr. Squire from the gunjah collected at the same time as that which furnished the preceding extract, but this he found to be exceedingly deteriorated. After this, on Dr. O'Shaughnessy's arrival, he obtained from him some extract prepared at Calcutta, and he ascertained that two grains of this produced twice or thrice the effect of six grains of the extract prepared by Mr. Squire. In saying this, he did not mean to impugn Mr. Squire's skill, but simply to state his belief that the efficacy of the drug depends on the freshness of the plant at the time the extract is made. Dr. O'Shaughnessy, he understood, would cause a quantity of the extract to be prepared at Calcutta, and transmitted to England for medicinal use.

Speaking of the effects of the plant in comparison with those of opium, Mr. Ley said he had been led to doubt its narcotic influence, as compared with the latter drug, but Dr. Clendinning preferred the hemp. The extract obtained from Calcutta is considerably stronger than opium. With respect to the hemp grown in this country, he had collected some in the Regent's-park, and had obtained from it a tincture and an alcoholic extract, but found it contained only about one-tenth the quantity of resin yielded by the Indian plant, and, as he expected, he had found it comparatively inert. The hemp was, however, gathered very late in the season, and the plant was, perhaps, too old. Fresh investigations would be made with it in the course of next summer.

Earl Stanhope inquired which would be the best form for preserving the virtues of the drug in its transmission from India, the tincture or extract, and whether smaller doses would not produce greater effects on the natives of India than on the inhabitants of these colder climates, on account of the greater nervous energy and irritability of the latter.

Mr. Ley stated that the spirit-duties and the bulk would prove insuperable objections to the admission of the tincture, which would be otherwise decidedly the better form. It would be necessary to send the tincture by the Cape, while the resin might be forwarded overland through Egypt.

Dr. O'Shaughnessy stated that he had sent to Mr. Pereira, four years since, some specimens of the drug, and he, after trial, had considered it to be unworthy of his recommendation, but he (Dr. O'S.) did not then know that the medicine was liable to be deteriorated by age; in fact, he was learning more about it daily. As the noble president had stated, the difference of nervous irritability and temperament must

be taken into account. Half the quantity that will affect an Englishman will act on a Bengalese.

In answer to a question from Dr. Houlton, Dr. O'Shaughnessy said that the male and female plants were employed indiscriminately, but Rumphius and Reid both consider the male superior in its medicinal properties.

Dr. Copland said that he had obtained specimens of the drug some time since from Savory's, and had tried it both medicinally and physiologically. He had not been made aware of the subject for discussion this evening until a few minutes before he entered the room, or he would have brought his memoranda with him; as it was, he must speak from memory. He took thirty drops of the tincture, and shortly experienced a slight acceleration of the pulse, with slight giddiness, and exhilaration of spirits; in an hour or two he felt an inclination to sleep. The next day he took sixty drops with increased effect, attended with dryness of the fauces; the day after, the dose was one hundred drops, when there was an increase of the giddiness, and he slept soundly. The pulse all this while was not increased above six or seven beats in the minute. He had tried it in disease; he had given it to an hysterical female, complaining of sleeplessness; with her it had produced giddiness and slight nausea, but she slept soundly. He had employed it in other cases, but was unable to state the results from the want of his notes. In some instances he had been obliged to relinquish its use on account of its causing feverishness and dryness of the throat. He begged to add, that the intoxicating and narcotic effects were increased by the dose being taken in ale or spirituous liquors. He had come to the conclusion that the medicine was not one-sixth or one-eighth as strong as it was said to be by Dr. O'Shaughnessy, but he believed it to be a medicine of some efficacy, and deserving of further trial.

Dr. Farre wished to inquire of Dr. O'Shaughnessy whether the inebriation was always attended with feelings of pleasure, or at times accompanied with those of alarm and terror, as described by Mr. Ley in a communication in the Provincial Medical Journal, and also what was the largest dose that had been given in this country.

Dr. O'Shaughnessy was not able to answer the latter part of Dr. Farre's inquiry, and with regard to the former he begged to say that apathy or insouciance was as often present as the feelings of pleasurable excitement, but he could not recollect a single instance in which alarm or terror had been occasioned by it. The natives of India will not use the churrus or extract for intoxicating purposes if it has been made more than twelve months.

Dr. Houlton inquired of Dr. O'Shaughnessy respecting the production of catalepsy, which it appeared had been caused by the drug in India, but not in any case in England.

Dr. O'Shaughnessy stated that it was a singular occurrence that, in the first three cases in which he gave the hemp, catalepsy was produced, but it was not of universal occurrence. He had seen it in twelve cases, but it was more general in animals than in man. Animals under the influence of the hemp, if not absolutely cataleptic, have a tendency thereto.

Thanks were then presented to Mr. Ley for his interesting communication, and the meeting adjourned.

Specimens of the churrus from Bengal and the Nepal, of the gunjah, the Calcutta and English extracts and tincture, were placed on the table.

The meeting-room of the society was exceedingly crowded throughout the evening, the gentlemen present manifesting the most lively interest in the discussion.

RETROSPECT OF THE MEDICAL SCIENCES.

RUPTURE AND ULCERATION OF THE SIGMOID VALVES OF THE AORTA.

Dr. Chevers, in a lengthy communication on the diseases of the orifice and valves of the aorta, published in "Guy's Hospital Reports," states that in cases where either the superior or inferior portion of the aortic orifice becomes permanently dilated, the valves (having in a great measure lost that support which they are accustomed to receive from extensive apposition with each other) become greatly exposed to suffer from the effects of disease or of sudden injury; for, being permitted to come in contact only at their upper margins, they are very apt to become sacculated below, and are, of course, in continual danger either of being suddenly ruptured whenever the arterial current is forcibly impeded, or of undergoing perforation more gradually, from the softening of atheromatous or other matter deposited in their structures. In sixteen cases out of nineteen of perforation of the valves, the lower part of the ostium was morbidly wider than the upper. In eleven of these, the upper part was much contracted, while the lower was greatly too wide; in the other five, the upper part was rather widened, but less so in proportion than the other. In the seventeenth and eighteenth, the superior part was dilated, while the lower was rather contracted; and in the nineteenth the whole of the orifice was far too narrow; but in this case another part of the aorta was congenitally malformed. In ten of the first sixteen cases, Dr. Chevers is of opinion that the enlargement of the lower part of the orifice preceded the formation of the perforations; the history of three cases was not known; in one, the laceration of the valves appeared to have resulted from an injury received some years previously to the individual's death; in another, the aorta had been removed too near the valves to allow of any idea being formed as to its condition, except that it was narrow; and in the last, the ascending portion of the artery, though extremely small, was perfectly free from all traces of morbid change. This diminution of the vessel may have arisen, as the disease advanced, from the difficulty the blood must have met with in entering the aorta between the masses of fibrine which adhered to the torn valves.

Cases are recorded by Dr. Elliotson, Dr. Penderleath, and Dr. Baillie, where the rupture of the valves took place from violence. In Dr. Penderleath's case, the injury seems to have occurred during a period of strong mental agitation; the patient survived five days, but it appeared that the ruptured valve had been undergoing softening for some time previously. It is probable that severe mechanical lesion or disruption of portions of the valvular structure, occurs far more frequently (in cases where the above described predisposing causes are in operation) as the results of sudden physical efforts and violent emotions, than is generally supposed.

Thirteen out of fifteen cases occurred in males, several of them distinguished, previously to their fatal illnesses, for remarkable bodily activity and muscular strength; thirteen of these fifteen were in the prime of life, showing that the disease is almost entirely

confined to that period of life when the energies both of mind and body act with their greatest violence, and also that the lesion is of a nature to prevent its subjects from attaining an advanced age.

Large portions of the valves may be destroyed by a process of acute ulceration. Of this form of disease, two cases are narrated by Dr. Watson, occurring in young females, suffering from first attacks of acute rheumatism. In either case, the whole of one of the aortic valves presented a mass of ragged ulceration. In one the destructive process, having penetrated the valve, had eaten a hole completely through the muscular septum into the right ventricle; in the other, an abscess, as large as a hazel-nut, was found in the substance of the septum, immediately opposite the diseased valve. One or two similar cases are recorded in the museum books of Guy's Hospital, but such are probably rare.

The most obvious immediate cause of perforation and laceration of the valves is the slow ulceration of atheromatous or other degenerated fibrinous matter deposited between their layers. It will be very frequently noticed that some parts of the thickened remnants of ruptured curtains are pierced by one or more defined circular apertures, each of which is surrounded by a small funnel-shaped coagulum, projecting towards the ventricle. These appear to have been the original ulcerated openings through which regurgitation first took place. By their gradual enlargement, the curtains are at length extensively laid open, and their tattered edges become covered with massive deposits of fibrine from the blood. These concretions usually have an irregularly branched form, and often attain a very large size, and become pendulous. When a lacerated curtain is thus much loaded, the sinus behind is usually far deeper than the other two, as if this indentation allowed the thickened mass as much room as possible to recede while the blood is passing into the aorta.

Neither total destruction of one of the aortic sigmoid valves, nor great inefficiency of the whole valvular apparatus, is certain to become immediately fatal to life; patients have survived such lesion for many years, but generally suffer from occasional attacks of palpitations, faintness, and suffocative dyspnoea, under a severe accession of which they expire. The duration of life appears to depend chiefly upon the strength of the left ventricle, which, from the impediment to the circulation offered by the diseased valves, is gradually more and more dilated, while its muscular power is constantly lessening from deficient nutrition, so that if, at any time, the circulation is greatly hastened, or the flow of blood through the arteries becomes suddenly impeded, as by a violent muscular effort, regurgitation from the aorta into the ventricle occurs with great force; the curtains of the diseased valves are further lacerated, and the weakened and dilated ventricle becomes over distended, and fails to contract upon its contents, so that the patient either dies instantly from complete failure of the heart's action, or expires from the same cause after suffering for a few hours under a state of deadly collapse, accompanied by extreme orthopnoea. In these cases,

any cause which tends to paralyze the left ventricle will be followed by a similarly fatal result.

USE OF THE POTATO IN SCURVY.

Dr. Baly, the physician to the Penitentiary, has published a communication in the "Medical Gazette" for the 10th of February, 1843, entitled "On the Prevention of Scurvy in Prisons, Pauper Lunatic Asyla, &c.," his object being to direct attention to the powerful antiscorbutic properties of the potato, and to its importance as an article of diet in prisons, workhouses, pauper lunatic asyla, and similar institutions. Sir G. Blane, Mr. Smith of the Triton, and M. Julia Fontanelle, had already shown that potatoes in the raw state are useful in the dietetic treatment of scurvy; but Dr. Baly is of opinion that its efficacy is not, as has been supposed, essentially impaired by the boiling heat, and that, as ordinarily cooked, it is an admirable preservative against scurvy. In support of this statement he mentions that this disease was very prevalent in the spring of 1840 among the military offenders sentenced by court-martial, while among the more numerous class, the convicts, it was never seen. A comparison was consequently instituted between the respective diet-tables of the two classes of prisoners, when it appeared, as was to be anticipated, that the military offenders were fed upon a diet nearly destitute of succulent vegetables, whilst the convicts received a liberal supply of that kind of food. The amount of animal food was nearly equalised. The disease showed itself in those soldiers who were passing through the second three months of their confinement in the prison. In order to afford them a more abundant supply of vegetable food, the readiest mode seemed to be the substitution of pea-soup, with vegetables, for the rice-soup, which was destitute of fresh vegetables. The quantity of soup was also increased to three pints weekly for each prisoner, being more than the convicts received, and yet the disease prevailed to nearly, if not quite, the same extent as before. The change thus made being inadequate to remove the tendency to scorbutic disease, Dr. Baly recommended that the soldiers as well as the convicts should have an allowance of one pound of potatoes with each dinner of meat; in other words that they should have two pounds of potatoes weekly during the first three months of their imprisonment, three pounds during the second three months, and four pounds after the expiration of six months. This addition to the dietary of the military prisoners was made in January, 1842, and not a single case of scurvy has since occurred.

When the change in the dietary of the Penitentiary was made in 1822, which was followed by the severe epidemic described by Dr. Latham, potatoes were altogether omitted, and to that circumstance Dr. Baly ascribes the occurrence of scurvy conjointly with the epidemic dysentery. The diet of the convicts has, since that period, contained an abundant supply of potatoes, and scurvy has never again attacked them; although other forms of disease, which were described as part of the epidemic of 1823—namely, the fever, dysentery, and nervous affections, have frequently reappeared.

The Penitentiary is not the only English prison in which scurvy has shown itself from a deficiency of succulent vegetables in the diet supplied to the pri-

soners. Several other prisons are mentioned by Dr. Baly, among which we may instance the Northampton, the Cambridge, Walsingham, and Ipswich county gaols, and the Wakefield House of Correction, in all of which the disease ceased after a change had been made in the diet-table, and a liberal supply of potatoes had been granted. Dr. Baly mentions other prisons where the disease continues its ravages, in consequence, it may be presumed, of the non-admission of a sufficiently vegetable diet. The magistrates of the city of London have recently excluded from the dietary of the prisons under their jurisdiction potatoes and all succulent vegetables, with the exception of the small quantity contained in a pint or two of soup allowed weekly—an experiment, certainly, of a dangerous character.

The foregoing facts obviously admit of an important practical application. Other succulent vegetables, being comparatively expensive, and their supply uncertain, potatoes (to the amount of from three to six pounds weekly) ought to form part of the dietary of all prisons, workhouses, pauper lunatic asyla, and similar institutions, where the food of the inmates is regulated by principles of strict economy.

A glance at the chemical analysis of the potato at once explains its antiscorbutic virtue. The various fruits, succulent roots, and herbs, which have the property of preventing and curing scurvy, all contain, dissolved in their juices, one or more organic acids—such as the citric, tartaric, or malic acid. Sometimes these acids exist in the free state, but more generally they are combined with potash or lime, or with both these bases. Now potatoes have been subjected to most elaborate chemical examination by Einhoff and Vauquelin, and by both these chemists they have been found to contain a vegetable acid in considerable quantity. According to Einhoff (Gehlen's Journal), this acid is the tartaric combined with potash and lime. According to Vauquelin (Journal de Physique), it is the citric, partly in combination with those bases and partly in the free state. The farinaceous seeds—such as wheat, barley, oats, and rye, which are destitute of antiscorbutic properties, contain no organic or vegetable acids.

TREATMENT OF VESICO-VAGINAL FISTULA.

Dr. Reid read a paper on the vesico-vaginal fistula or fissure before the Westminster Medical Society, in the course of which, after adverting to the causes, seat, and semeiology of that unfortunate accident, he recommends the use of a simple India rubber bottle as likely to afford relief. The aperture forming the communication between the vagina and neck of the bladder is occasionally large, and the intention in using the instrument, therefore, would be, that it should effectually form a partition or complete plug between these two organs, thus preventing the constant flow of urine through it, and the consequent great irritation, inflammation, and thickening of the callous edges.

The apparatus consists of a common India rubber bottle of moderate size, but free, if possible, from those lines and ornamental tracings which are placed on some, as they render them more liable to burst on distension, owing to the unequal thickness. It should be of a pyriform shape, without any shoulders or sudden bulging out from the neck or stalk of the

bladder, as the latter form interferes with the ready extraction of the instruments when required, or at least occasions unnecessary pain in removing it. To the neck of the bottle is attached a mount containing a female screw, at the side of which is a small stop-cock. The other portion of the apparatus consists of a small condensing syringe, of the shape and size of the common breast-pump, the distal end of which terminates in a male screw, corresponding to the one attached to the bottle. The latter being well oiled or larded, and the air pressed out of it, is folded longitudinally, and carefully passed up into the vagina until the lower end or mount is at the vulva. A certain portion of air is now drawn up into it by the simple removal of pressure, but it is not sufficiently distended till the condensing syringe is fixed, and a few strokes of the piston used. The number required must depend on circumstances, but will soon be known by the patient complaining that the further distension begins to give pain. The stop-cock is now turned, the syringe disengaged, and a napkin applied to the vulva, and fastened as usual.

The bottle is to be removed for a short time every evening, previously allowing the air to escape by the stop-cock, the vagina to be gently syringed out with warm water, and the bottle, after having been washed, to be replaced. Should its presence at first cause pain or inconvenience, it may be obviated by complete rest, the use of the hip-bath, and by warm vaginal injections. The comfort resulting from the use of the instrument is soon perceived, as it prevents that constant flooding of water which had previously taken place, excoriating the parts, and rendering the bed and clothes almost unfit for use. At the commencement of the treatment, it may be advantageous to pass the catheter occasionally, should there be any difficulty in passing urine by the natural passage. The daily removal of the instrument after passing urine, and the washing out of the vagina, will tend to allay inflammation, and prevent the accumulation of any irritating secretion about the affected parts. If possible it is better to have a second bottle, using it on alternate days, allowing the one removed to remain in water for a time, and then to be exposed to the air until again required. It will be rendered more durable by encasing it in an oil-skin covering, or by coating it with wax.

Three cases are narrated by Dr. Reid, in which the adoption of this apparatus afforded relief.—*Lancet*, Feb. 18, 1843.

FACIAL HEMIPLEGIA.

François Fontaine, aged twenty-five, after having had two attacks of syphilitic chancres for which no internal treatment was employed, was seized with secondary symptoms, which were treated with the proto-ioduret of mercury, apparently with beneficial effect. A relapse occurring, he was placed under the influence of the proto-ioduret of mercury combined with the ioduret of potassium, and again apparently with advantage. He had not long ceased taking medicines, when he was obliged to place himself under M. Ricord's care, for commencing deafness and frequent attacks of giddiness. When he was admitted into the hospital, he presented all the signs of well-marked facial hemiplegia of the left side. The faculty of smell was, if not lost, at least much diminished on

the left side, and the sensibility and taste of the left side of the tongue appeared to be less than on the right side, but the experiments were not conclusive. The uvula was thrown a little forwards, and very much to the right side, which position it kept in whatever direction the velum pendulum palati was moved by the patient while his mouth was opened. This state of the part was recognised by M. Ricord as well as by Mr. Macarthy.

Fontaine was admitted into the hospital on the 13th of last August. He was ordered fifteen leeches to be applied behind the ears, a blister to the sinciput, to be kept open for a fortnight, and then mercurial frictions to be substituted for it; the ioduret of potassium to be given internally, the dose to be raised gradually to three scruples a-day. This treatment was persevered in to the 2nd of September, when a marked amelioration had taken place in the symptoms of the paralysis; the pain in the head and the giddiness were entirely removed, and the irregularity of the features was less evident. The uvula was nevertheless still carried to the right side. By the 18th of the same month, the use of the medicine having been continued, the paralysis was almost entirely removed; the man could sing and whistle freely; he had not any difficulty in swallowing, nor any imperfection in the organ of smell; the uvula was perfectly straight, and continued so in every movement the patient made.—*Gazette Médicale*, Dec. 24, 1842.

THE WATER CURE.

A HYDROPATHETIC BALLAD.

To Malvern Well came Mary Bell,
To nurse poor Peter Head;
For he was lying sick and sore,
All in his watery bed.
"O, Peter dear! O, Peter dear!
How could they serve you so?
To wrap you in a cold damp sheet,
All chill'd from top to toe?"
"Oh! do not fear for me," he said,
"For, like the ocean's tide,
Full five-and-thirty tumblers now
Are washing my inside.
Then cease to weep, dear Mary Bell,
Nor shed another tear;
And cease to *whine*; I'm not allow'd
To touch it while I'm here."

Then from his head the cap she took,
Which they'd put on the spout;
And, with her pretty little hand,
She wrung the water out.
And, gazing on his pallid brow,
She by his couch did stand;
And, having wrung the cap quite dry,
She wrung—her lily hand.

Had any other watery death
Than this befallen you;
O! had you fought with *Wellington*,
And died at *Waterloo*,
You'd moulder then in honor's grave;
But now, O, Peter Head!
You lie on this damp couch, I trow,
Quite mouldy ere you're dead."

"Oh! do not say that doctor's stuff
 Could cure my woesome ills;
 Or think that ever health is found
 In potions or in pills.
 No noisome draught could bring relief,
 No drug my fever quell;
 Health, rosy maid, like Truth, is found
 In the bottom of a well."

"O, Peter dear! fine water'd silks
 I've often seen, 'tis true;
 Of watery setting suns I've heard,
 And watery suchet too.
 If with a watery lover I
 Must make myself content,
 I'll to the Coldstreams go, and choose
 One from that regiment."

"Dear Mary Bell, no words can tell
 How sorely I'm amaz'd;
 And can you a wet blanket throw
 Upon the hopes you've raised?
 For, were I pump'd upon all day,
 And drench'd with water too,
 It never would put out the flame
 That burns so bright for you."

"If you get well, O, Peter Head,
 Go seek a maid more bold:
 I fear you'd be so very damp,
 You'd always give me cold.
 A widow, too, I soon should be;
 For one who does such deeds
 As almost drinking rivers dry,
 Would leave me in the weeds."

Then down he hung his dripping head—
 He closed his watery eye;
 And, wrapping close his cold damp sheet,
 He turned him round to die:—
 "Farewell," he said; "when Peter Head
 Is gone, you'll know his merits!"
 And so he left this watery world,
 For another world of spirits.

FRENCH INSTITUTE.—ELECTION OF M. RAYER.

M. Rayer has been elected member of the Academy of Sciences (section of agriculture) by a majority of forty-one votes in fifty-six.

MEDICAL MEMBER.

Dr. Boyd, the newly-elected member for Coleraine, is, we believe, a member of the medical profession.

OBITUARY.

At Bristol, Richard Smith, Esq., senior surgeon to the infirmary.

PROMOTIONS AND APPOINTMENTS.

War-office, February 17, 1843.

33rd Foot—Assistant-surgeon W. Miah Murphy, from the 1st West India Regiment, to be assistant-surgeon, vice M'Donald, promoted.

46th—Surgeon James Duncanson, M.D., from the 1st West India Regiment, to be surgeon, vice Michael Galeani, who retires upon half-pay.

1st West India Regiment—Assistant-surgeon John M'Coy M'Donald, from the 33rd, to be surgeon, vice Duncanson.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, February 17, 1843.

W. Thom, S. H. Steele, R. Brown, T. D. Martin, J. G. Sproston, H. Gavin, J. Growse, A. C. Ayres, R. Nugent, G. Allen, C. H. Duck, W. J. Bryant.

BOOKS RECEIVED.

Treatment of the Diseases of the Eye by Means of Prussic Acid Vapor, &c., by A. Turnbull, M.D. London: Churchill, 1843. pp. 89.—[It is useless for this personage to send his pamphlets to us. However inclined the editors of the "Gazette" and "Lancet" may be to countenance his *puffs*, the editors of this Journal will never so far forget what is due to the profession as to notice any communication from such a quarter.]

A System of Clinical Medicine. By Robert James Graves, M.D. Dublin: Fannin and Co., 1843. 8vo. pp. 938.

TO CORRESPONDENTS.

Scarboro'.—The circular has been received; we shall take care that the *president* sees it.

H. L. S.—They profess to examine in the first four books; whether selections be permitted or not, we cannot say.

The *Leeds Journal* and the communication on *phrenomagnetism* have been received. We are unwilling, except under special circumstances, to occupy our space with a notice of the gentry who have taken up this new branch of industry.

Mr. Miller's case of Catalepsy shall appear in our next.

Mildenhall.—The laws relative to the practice of medicine are all in disuse, and any one may practice with a continental degree, or take of a ship, if it so please him and the owners of the craft.

Irish Medical Charities.—We have received a copy of *Mr. French's* bill, but it is unnecessary to occupy our space by an analysis of it, as there is no prospect whatever that *Mr. French's* bill will pass through the House of Commons.

ERRATA.

In last Number, p. 408, col. 2 (in note to *Dr. Hopper's* article), for "jainais," read *jamaïs*; for "vupareille," read *vu pareille*.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
 LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET,
 CAVENDISH SQUARE, LONDON.

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CLINICAL LECTURES

DELIVERED AT THE

METROPOLITAN FREE HOSPITAL.

BY MR. BENNETT LUCAS,

Senior Surgeon to the Institution, and one of the Lecturers on Anatomy and Physiology at the Westminster Hospital School of Medicine.

Lecture VI.—Jan. 27, 1843.

GENTLEMEN,—At our last meeting I entered somewhat fully into the consideration of gonorrhœa, as it presents itself to us in its first stage, and illustrated its symptoms in the case of William —; to-day I shall speak of its second stage. There are some few points, however, in connection with the first stage of the disease upon which I have but slightly touched, and which are of too much interest and importance to be passed over hurriedly; these I shall first dismiss.

I have already stated to you that, from the constancy with which the earliest symptoms of gonorrhœa present themselves at one part of the urethra, the term "specific distance" is applied to that locality, and that this varies from an inch to an inch and a-half distant from the external orifice of the canal. Now, as the disease so constantly, I may say so invariably, develops itself from this point, the occurrence cannot be accidental, and it appears to me to afford a very strong argument in support of the opinion that some of the specific virus of gonorrhœa enters the urethra during coition, and most likely gets lodged in some of the lacunæ, which we know to exist in great size and number at this situation. That there is nothing to prevent the entrance of the gonorrhœal virus into the male urethra during coition, both the economy and structure of the parts warrant me to conclude; but as this opinion is opposed to the greatest English authority on the question, Mr. Hunter, you will, perhaps, excuse me for saying something more in corroboration of the views I have advanced on the matter. If it is shown that the syphilitic virus enters the urethra, I apprehend the question will at once be set at rest; for if such occurs in the case of a specific fluid, so small in quantity as that afforded by syphilitic ulceration, how much greater are the chances, nay, I shall say, how certain is it, that a fluid secretion so abundant as that of gonorrhœa, must gain access to the male urethra during an impure coition? Although the existence of chancre within the urethra is not very usual, yet the cases we have seen in this institution, independently of those I have witnessed in my private practice and elsewhere, are of themselves sufficient to establish the fact of such an occurrence. In all these cases there existed a solitary and well-defined oval sore within the canal, situated at such a distance from its external orifice as to forbid our supposing that the chancre could have originated in any other way but by the actual contact of the virus—not by the syphilitic poison selecting, if I may use the

expression, one part of the urethra more than another, but by its being lodged in some of the lacunæ, and retained there sufficiently long to ensure the development of its specific characters. Three-fourths of the cases of syphilitic sores, which present themselves on the inner prepuce and glans, are met with in some part of the fossa behind the corona glandis, and especially at either side of the frœnum preputii; these localities doubtlessly arising from the facility which is afforded by the anatomical disposition of the parts to the lodgment of the specific virus. In like manner in gonorrhœa, I conceive the virus to be lodged internally in the first instance; and also, when a chancre within the urethra presents itself, that the virus of syphilis within the canal preceded it.

Unless I can show that the urethra at or about the specific distance is more favorably circumstanced for the detention of any virus which may gain access to it than that portion of the canal more anteriorly, you might fairly ask why is not the seat of gonorrhœa at the external orifice or just behind it? The answer to this question, however, will be found in the anatomical fact that the *fossa navicularis* is the specific distance, and that in it are the numerous lacunæ to which I have already alluded—a disposition of parts just as favorable to the retention of either virus as the fossa of the glans or the angles on either side of the frœnum. That neither gonorrhœa nor chancre within the urethra, properly so called, arise from extension of either virus from the glans or prepuce, appears to me to be satisfactorily proved by the absence of disease in any other part but the urethra in such cases; instances of which, particularly in gonorrhœa, you can every day observe in this institution; and, on the other hand, the cases of ulcers, excoriations, and discharges resembling that of gonorrhœa, which are confined to the glans and inner prepuce for weeks without the urethra being affected, are so numerous that they forbid the supposition of chancre within the urethra, or gonorrhœa being caused by the extension from without of either virus.

In the year 1835 a patient, named Aubrey, came under my care for gonorrhœa, at the Greville-street Free Hospital, to which institution I was at that time one of the surgeons. He was a married man, the father of four children, and got the disease in illicit intercourse. The peculiarity of his case was this—he had no "specific distance," for his urethra opened two inches and a half behind the extremity of his glans; a shallow groove upon the under surface of the glans marked the course the urethra should have taken; the glans was well developed, and had at its extremity a slight depression; the prepuce was deficient posteriorly, and there was no frœnum. A transverse band of skin, forming a small pouch, guarded the abnormal orifice of the urethra, and the canal was very much dilated behind the opening. He had a

yellow discharge, which came from not more than an inch of the urethra, which could be seen to ooze out from the red mucous membrane, and he had pain in making water and chordee. The absence of the specific distance in this case did not protect the individual from gonorrhœa, but the disposition of the external orifice favored the retention of the gonorrhœal virus, which appears to me to account satisfactorily for the disease being located as it was. Although it does not belong to our present subject, yet I may here remark the interesting fact that this patient was the father of four children, notwithstanding the ill adaptation which must have existed between the orifice of his urethra and that of the uterus during connection.

In the case of William —, which I mentioned at our last meeting, I injected a strong solution of nitrate of silver when he first presented himself, and repeated it the next day; these two injections were sufficient for his cure. With whom this practice originated I cannot tell, but as long ago as the year 1833 I published some cases illustrative of the safety with which it might be adopted in proper cases, and the almost certainty in such of its producing a cure. Since that period I need scarcely tell you I have had many opportunities of testing the efficacy of this treatment, and the result is that I can conscientiously recommend it to your notice. At the time I published the cases I appended some remarks to them, which are not impertinent to the present occasion. "It is only in the first stage of gonorrhœa that this injection will be of benefit; in gleet it failed altogether; and in the inflammatory stage of the disease, when severe scalding, chordee, &c., are present, I would not be hardy enough to make use of it.

The manner in which nitrate of silver acts so effectually in the cure of gonorrhœa in its first stage, must be by destroying the specific virus and substituting in its place a simple inflammatory action, which gradually subsides, leaving the urethra in its natural healthy state. To effect, therefore, this object, it is necessary that the injection fully reaches the seat of the disease, and that it be well applied to the portion of the urethra between this part and the orifice. I can readily conceive a case where the injection only reached half an inch from the orifice, or was only partially applied, leaving the virus still in operation, the parts not only having to contend against its action, but also against the inflammation produced by the injection. Such is likely to be the case if the surgeon commits the syringe to the hands of his patient, and such actually occurred in one case, where, from an imperfect application, great pain followed, extending along the urethra to the prostate gland, accompanied by all the symptoms of the second stage of the disease in an aggravated form; which symptoms could not have been much relieved by the patient having taken internally a mixture of balsam copaiba, cubeb, and camphor mixture.

I, therefore, always apply the injection myself in the following manner:—Having filled the syringe I compress the urethra with my left hand, about two inches and a half from the orifice, to prevent its reaching further, and taking the syringe in my right hand I inject the solution, satisfying myself that it is well applied to all the intermediate portions of the canal.

In conclusion, I would again impress the danger of using the remedy in the second stage of gonorrhœa, the success amounting almost to certainty of its curing it in its first stage, and its failure in gleet."

To these remarks I shall now only add that at first I used the solution of nitrate of silver in the proportion of ten grains of the salt to an ounce of distilled water, but that now I use it double this strength, and sometimes even in the proportion of thirty grains to the ounce. I have tried it in other forms for the same object, such as made up into a kind of ointment with lard, but none answers so well as the solution. The syringe which you should use in injecting it should be made of glass or ivory; if you attempt to use a metal syringe, the moment it comes in contact with the solution a black deposit takes place, you dirty the patient and yourself, and all goes on unsatisfactorily. A caoutchouc bag, armed with an ivory pipe, in the absence of the glass syringe, you will find the best instrument; but the latter is far preferable, and not the least of its recommendations is that you see the exact quantity of fluid you inject.

It occasionally happens that a patient will resist this treatment when proposed to him; when such is the case, our duty will be to anticipate—to be a day's march, as it were, before the second or inflammatory stage of the disease sets in. We must impress upon the patient's mind the absolute necessity of abstinence from spirituous and fermented liquors, in short, to enlist himself for a time under the banner of Father Matthew (a laugh); to use mucilaginous drinks, acidulated and sweetened to the taste, such as barley water, linseed tea, &c., and to be also economical in the consumption of animal food. With this dietetic treatment we should enjoin the patient to observe as much rest as he possibly can, not to take horse exercise, and at once to wear a suspensory bandage to support his testicles, and not allow the penis to hang pendulous. Whether the patient's bowels have been moved naturally, or are constipated, you should at once purge him, and probably the best medicine for this purpose is the compound powder of jalap, administered in doses consistent in quantity with the constitution of your patient, and the facility with which his bowels are usually affected by aperient medicine. Should there be any objection to the exhibition of this aperient there are a host of others you can apply to, and though last, not least, the infusion of senna with sulphate of magnesia. Besides the administration of purgatives, I would at once recommend you to take blood from the penis, either by means of leeches applied to the under surface of the urethra, or, and which I know to be far preferable, by opening the dorsal vein. By thus acting promptly and with decision in the stage of gonorrhœa I am now dwelling upon, you will either by the first treatment cut short the disease altogether, or by the second render the inflammatory stage of the disease very amenable to the remedies proper for its cure. Once more I would impress upon you that the time from the first appearance of gonorrhœa to the commencement of the second stage is very short, and that you must be prompt in any treatment you adopt, more especially in that which I have recommended to you by the nitrate of silver injection. If the symptoms of the second stage show themselves, do not hesitate what

course to pursue; at once adopt the antiphlogistic treatment, by submitting to which your patient will be speedily relieved from a most distressing affection, dangerous in its consequences, and, if allowed to continue any length of time, always difficult of cure, and this more from the conduct of the patient than from inefficiency in our therapeutic agents, or want of skill on the part of the medical attendant.

In accordance, Gentlemen, with the plan I have laid down to pursue in these lectures, I shall first select from the numerous patients afflicted with the second stage of gonorrhœa some well marked examples, and shall then offer the observations I deem necessary to make on this stage of the disease; and as the lectures on the diseases I am now delivering are being published in the *Provincial Medical Journal*, you will at once, I am satisfied, coincide with me in the propriety of not designating the representative of any case beyond his Christian name; his age or any peculiarities of diathesis I shall, of course, allude to; but his surname, his residence, and local matters of this kind, although entered in the books of the hospital, are unessential to my present purpose.

Second Stage of Gonorrhœa.

CASE I.—Robert —, aged twenty-two years, has had gonorrhœa for five days; he now suffers from the following symptoms:—there is a profuse yellow discharge from the urethra, which is so abundant that the marks on his linen are in large yellow patches, and are stiffened or crisped; he has frequent calls to make water, and severe scalding when he does so; at night he is troubled with erections of the penis, as often as three or four times, and these are accompanied with severe chordee; the lips of his urethra are red and swollen, and the redness extends for some lines over the surface of the glans; on pressing the urethra at the base of the glans he complains of soreness, but he does not when pressure is made at its distal extremity; beyond the base of the glans pressure gives him a little pain, but more towards the bladder he suffers no inconvenience; from the base of the glans, for two inches towards the bladder, the urethra is hard and resisting to the touch; the glans is swollen, the prepuce in its natural state covered it, but now it is one-half denuded; this part of the penis has the appearance of being in a semi-state of erection. He dates the origin of his present disease to a connection he had three weeks ago, but he is uncertain whether it might not have been a fortnight hence; he is, however, certain that he has not had connection for the last fortnight, and that he had no distressing symptoms beyond a slight discharge from the urethra five days ago.

Dec. 13, 1842. I opened the dorsal vein, which was much distended, and, after taking eight ounces of blood, bound up the penis loosely and checked the bleeding. He was ordered to take two tablespoonfuls of the following mixture every alternate hour:—

Sulphate of magnesia, six drachms;
Tartrate of antimony, three grains;
Water, twelve ounces.

14. The first dose of the medicine vomited him, and the others affected his bowels four times during yesterday and to-day; he had an erection at night,

but no cordee; the pain in making water has “almost left” him, but as yet there is not a very sensible diminution in the discharge. To continue the mixture until to-morrow.

15. The scalding has all but ceased; he feels an itching along his urethra; he has had erections last night, but no chordee; the discharge is somewhat diminished. He was ordered to take forty drops three times a-day of a mixture containing equal parts of balsam copaiba and spirit of turpentine.

Under this treatment, with the occasional administration of an aperient, he got well in less than three weeks.

CASE II.—December 16. William —, aged twenty years. This is his first gonorrhœa. Had connection ten days ago, and observed a discharge on his linen three days afterwards; some hours afterwards, he says the next morning, he had pain in making water, which he was called upon frequently to do, and which got severer after each micturition; the expulsion of the last drops of his urine pained him most; he has had erections, accompanied with chordee, for the last three nights, and last night he had not an hour's continued rest; he complains of uneasiness in the perineum, and pains down the inner side of his thighs; the discharge is at present considerable but not profuse, and is of a brownish yellow hue; the glans is redder than natural, for its anterior half is of a conical shape, and the lips of the urethra are red, swollen, and pointed; the urethra is hard to the touch from its external orifice to the perineum; the lateral veins of the penis and the vena magna are distended; his prepuce is long and more than covers the glans, and both glans and inner prepuce have the characters of mucous membrane; he complains of pain at the angle of reflection of the penis from the pubes. The dorsal vein of the penis was opened, and from six to seven ounces of blood obtained; more could not be had in consequence of the patient having fainted; he was ordered the following pills at bed time:—Calomel, extract of hyosciamus, of each five grains; and to take a tablespoonful of the sulphate of magnesia mixture every four hours during the day.

17. Had erections last night, which disturbed him, and once an involuntary emission; the pain which accompanied each was sufficient to cause him slight uneasiness, but nothing more. The scalding still continues, and he thinks is not abated; his other symptoms are as yesterday; the medicine produced two plentiful motions. The dorsal vein, or rather one of its lateral branches, was carefully opened, and about the same quantity of blood was obtained as yesterday. He was ordered to repeat the pills and mixture as before.

20. The medicines moved his bowels five times since last visit. He has had erections, but no chordee; the scalding has given way to a tickling sensation along the anterior half of the pendulous urethra; he has lost the sense of uneasiness in the perineum and the thighs; the discharge is now of a yellow color and more in quantity; the redness of the glans and the fulness of the lips of the urethra have almost disappeared; the urethra is softer to the feel than the day before yesterday; is still painful when compressed, but not so much so as before; he makes water much less frequently. He was ordered the fol-

lowing ointment to rub along the under surface of the urethra three times a day :—

Extract of belladonna, a drachm;
Lard, half a drachm;
Mercurial ointment, two scruples;
Camphorated oil, sufficient to make into a soft ointment.

Also, a mixture of balsam of copaiba and solution of potash in equal parts, of which he is to take a small teaspoonful three times a day, in a cupful of infusion of linseed.

23. The symptoms of gonorrhœa are gradually subsiding; the discharge is less and is more of a watery consistence; the hardness and soreness of the urethra have nearly disappeared; his bowels have not been moved for three days. To repeat the pill of calomel and extract of hyosciamus; to have a senna draught the following morning, and then to resume his mixture, but to substitute spirits of turpentine for the solution of potash. Continue the friction to the urethra, with the ointment.

30. The only symptoms which remain of his disease are the following:—A slight discharge of muco-purulent matter, tenacious enough to glue together the lips of his urethra in the morning, which, upon pressing the urethra, are easily separated, and a large drop or two of yellow matter is forced out; during the day his shirt is slightly spotted; the edges of the external orifice of the urethra are redder than natural, but all the fulness has disappeared. He has abstained from spirituous liquors all through his treatment, but has taken a little porter at his dinner. To use the following injection four or five times a day :—

Alum, half a drachm;
Distilled water, ten ounces. Mix.
January 13. Dismissed cured.

He used no other medicines but the injection, except a dose of salts, which he prescribed for himself.

CASE III.—Jan. 27. Thos. —, aged forty-one, applied here three weeks ago in the second stage of gonorrhœa. He stated that he had the discharge five days before he applied for relief; that it came on five days after connection; that it was unpreceded by any premonitory symptoms, but that scalding at the extremity of the penis supervened after the discharge had continued two days. He was ordered the copaiba mixture, with solution of potash, a drachm three times a day; this he took for a week, and it so alleviated all his symptoms that he gave up attending and went to his work, which was that of a stone mason.

He now complains of pain along the entire urethra, extending from the glans to the bulb; the urethra feels hard, like a cord, to the touch; the bulb is much swollen, and here he complains of most pain; when he coughs he feels uneasiness in the perineum. He has had gonorrhœa three times, but not for the last five years; and from the appearance of his glans, a third of which is lost, he must have suffered also from syphilis. The dorsal vein of the penis was opened, but scarcely any blood could be obtained, on account of the small size of the vessel. Six leeches were applied to the perineum, and also fomentations during the day. He was ordered to take immediately an ounce and a half of castor oil, and after his bowels had been moved to take two tablespoonfuls of the following mixture three times a day :—

Camphor mixture, seven ounces;
Mucilage of gum arabic, three ounces;
Sweet spirits of nitre, five drachms;
Tincture of opium, a drachm and a half. Mix.

29. His symptoms are not much relieved. The discharge from the urethra has ceased altogether, and the swelling in the perineum is the size of a small hen's egg, is situated in the mesial line, is equally hard in every part, and has continued gradually to increase in size. He makes water with difficulty and with scalding both in the perineum and at the glans, but the size of the swelling is unaffected by the flow of urine. He was ordered to apply more leeches to the perineum, to encourage the bleeding by fomentations and poultices, and to take an aperient mixture.

February 11. This day the abscess was opened, and more than an ounce of purulent matter was discharged. Since last report he has had shivers, and on Sunday last he fainted. The abscess did not communicate with the urethra, and he makes water more freely than he did before it was opened.

21. The abscess has been healing from the bottom by granulation, and is now nearly closed; the bulb of the urethra is much diminished in size; the discharge has returned in a slight degree; he passes water as before, which continues to scald him at the bulb and glans.

This patient, Gentlemen, is still under treatment, and at our next meeting I shall make his case, as well as the others I have read, the subjects of illustration in speaking of the second stage of gonorrhœa.

CASE OF CATALEPSY, WITH REMARKS.

[Read before the Chichester Medical Society, Feb. 7, 1843.]

By GEORGE MILLER, M.R.C.S.

(Published at the request of the Society.)

The case to which I would invite your attention on this occasion is that of the late Rev. J. G—, curate of W—, who lived highly respected, and died at the age of thirty, deeply lamented for his talents and worth. The patient was tall, of stout, osseous frame, and had evidently been strongly muscular, of what I should call the sanguineo-nervous temperament, had always enjoyed robust health, and, until late, had been of florid complexion and cheerful disposition, although he was occasionally the subject of slight nervous depression. He was formerly intended for the bar, but, owing to his dislike of that profession, he subsequently entered the church, and became what will be well understood as a hard student. He had been ordained deacon to W—, to gain his twelve-month's title for priest's orders. I mention these facts, trifling as they may seem, that you might have a thoroughly connected view of the whole case, and to show you that he still persisted in close application to his studies, in order to qualify him for his contemplated examination before the Bishop of Chichester, and that this intensity of sustained mental occupation was an immediate and exciting cause of the encephalic disease to which he afterwards fell a victim.

On the 21st of August, 1842, I was visited by Mrs. O., who requested me to call the next day on her nephew, the Rev. Mr. G—, at W—, as she en-

tertained the most painful apprehensions not only as regarded his bodily health, but as to the state of his mind. On the 22nd, however, about nine, a.m., I was sent for hastily to attend upon the reverend gentleman, in consequence, as the messenger alleged, "of the Rev. Mr. G—— having gone raving mad." I happened to be from home, but my partner, Mr. Spong, arrived there speedily, and the fact of insanity was soon established, for he was shown into a bedroom where the patient was kneeling in a state of complete nudity, dashing basins of cold water over himself, and praying most earnestly "that the waters of life he was now washing in would cleanse his soul from all sin."

Mr. Spong persuaded him to dress, and ultimately left him, more composed, under the care of his friends. On my return home in the afternoon, I saw him in consultation with Dr. M'Carogher, when it was made to appear, from himself and friends, that for some time previously the patient had betrayed much eccentricity in his habits and opinions, especially relating to religion, theoretically and practically, and that the particular event which brought on the crisis we then witnessed was shortly this:—He had that morning called on a notorious drunkard of the village to read him a sermon on his besetting sin, but his parishioner received his ministerial offices so contemptuously as to resolutely order the reverend curate out of his house. This conduct had such an effect upon his already excited feelings, that he rushed into the square of W——, holding his Bible in the air, knelt down praying God to subdue the obduracy of the sinner's heart, and, rising up, began most vociferously to exhort people to repentance, for sin had darkened the land, and the judgments of God were coming upon the earth. After much difficulty he was compelled to go home, when he ran up into his bed-room, stripping himself, and washing as before stated. This process he had repeated thrice, and such was the intensity of his convictions respecting his own impurities, that each time he determinedly refused to be dressed in the same clothes, because they were unclean; and even with us his anxious desire was to be again allowed to perform the same ablutions. We found him dressed, sitting in his study, and sullenly turning over the leaves of a Greek Testament, refusing all food and drink, exhibiting heartfelt distress at the sinfulness of man, beseeching us not to ask him any more questions, and, in fact, betraying himself in the most pitiable light of a religious monomaniac. We discovered that he had of late practised the most rigid religious discipline as regards fastings, tasting animal food only twice in the week, and often going to church on a Sunday morning without having broken his fast, and performing the entire duty. Another event which had contributed very materially towards his present condition was the miserable death of his brother, who was murdered by his own troops in the *melé* at Cabul, in India; and this, conjoined with his rigid religious views and discipline, had deprived him of sleep at night, as well as considerably emaciated him for want of proper nutriment. He maintained that God could and would support him without any food if it pleased Him; nor could we succeed in showing him the fallacy of such an opinion, although we argued that God would not exert a miraculous power on his

behalf, because he refused to avail himself of the good things of this life, which had been so bountifully placed within his reach. His head was rather hot, the conjunctiva a little vascular, and his pulse small and 76. His tongue was moist, and but slightly furred, and his bowels generally constipated. He declared himself free from all pain or sickness, and that he was quite well, excepting now and then a little headache. He was ordered to bed, to have leeches to the temples, cold lotions to the head, morphia in a small dose, with compound extract of colocynth; to be carefully watched, all religious books and water to be removed from his sight, and to have tea, coffee, or arrow-root, according to his choice. I saw him again at midnight; the leeches had bled freely, and I ordered him a blister to the nape of his neck.

August 23. No sleep; sullen and reserved, still dwelling upon religion; craving water to wash, and occasionally evincing symptoms of excitement; says he is in no pain, and refuses every kind of nourishment. He recognised a medical relative from London, who had come down to personally watch over and attend upon him. Head cool; pulse 78; bowels had not been acted upon, nor was it possible to give the pills; micturition free, and urine natural.

24. No variation, but that, during an interval of consciousness, he had taken the pills and an aperient mixture, which had operated freely. He seldom replies to questions, although he evidently understands them, saying, "Pray don't ask me; I am quite well, but you cannot judge of me." He has slept comfortably for two or three hours during the day, and has taken a little fruit and arrow-root. Head hotter, especially down the mesial line; tongue clammy; skin moderately warm; pulse 80, and rather fuller. Ordered ice to be applied constantly to the shaven head.

25. Much the same this morning, and still imploring for water to wash, and pure water or pure wine to drink. In the middle of the day his looks became wild, and his actions evidently uncertain; indeed, from his anxiety to get the attendants to quit his room, no doubt he meditated self-injury. In the evening he seemed more composed and conscious, inquired after some absent relatives, and took a little bread and milk and fruit.

26. The quietness of last night was soon succeeded by restlessness and excitement, manœuvring to get his room vacated, and demanding hastily of the attendant, when he shut the window, whether he "was afraid of his getting out?" He became so unmanageable now that it was deemed advisable to put him under corporeal restraint, confining or releasing him as circumstances justified. All this, however, subsided in an hour or two, and was followed by an attack of catalepsy, which still existed when I visited him at eleven, a.m. He was then lying motionless on his back; limbs straightened out; eyes half closed, injected, and suffused, and perpetually rolling; respiration 22, and so tranquil as to be scarcely audible even close to the lips, but not unnatural in any other way save being a little abdominal; heart tumultuous in action, imparting a jerking sensation to the pulse, which was irregular as to frequency, varying constantly from 70 to 96; the head rapidly acquiring heat, if the ice was omitted for ever so short a period;

profuse perspirations; feet and hands quite warm; tongue clammy and white; no epigastric or abdominal tenderness whatever; bowels inactive, and urine scanty, nor was the bladder in the least degree distended. On being raised in bed, the body remained fixed at any angle, and the head preserved any direction it was placed in; but this cataleptic action was far more marked in the upper extremities, which retained any position, however unnatural, fatiguing, and even impossible, for the same length of time under ordinary circumstances, although it required no force to effect any alteration, nor did the muscles themselves appear very prominent or hard. In the lower extremities the catalepsy was considerably modified as to its influence, but still prevailed to a certain extent. At three, p.m. (Dr. M'Carogher in consultation), his eyes were open, but fixed; countenance looked conscious, and tolerably placid; there was occasionally slight strabismus, and yet the pupils acted beautifully, contracting upon the least light being thrown on the eye. He would not reply to any questions, and his teeth were so clenched that it was utterly impossible to administer anything through the mouth. Respiration 26, quiet and abdominal; neither cardiac or respiratory auscultation elicited any abnormal sounds; indeed, the action of the heart was quite moderate, and the pulse, which had lost its "jerk," was 86. Ordered leeches to the head; to persist in the ice application, and a blister between the scapulae. Eight, p.m.: The patient continued motionless and unconscious all day, from three, a.m., till seven, p.m., an interval of sixteen hours, when he suddenly heaved a long and loud sigh, raised himself in bed, and inquired for wine. This being refused, he laid down again, soon relapsing into his former state, but at midnight he again aroused, and partook calmly and freely of beef tea, arrow-root, bread, and a peach, the last of which he devoured so eagerly that he swallowed the stone, the peach having been most incautiously given to him whole by the attendant. At three, p.m., he again became unconscious, and was so at the morning visit of the

27. The leeches had bled freely; the respiration was now short and hurried; pulse 96, and full; urine passed unconsciously, but no relief from the bowels; great heat along the mesial line of the head; eyeballs not painful on pressure; pupils act well, but the eyelids and lips have a perpetual quivering motion; the catalepsy fast disappearing, being only partial in the upper extremities. Ordered a pill, with croton oil. Eight, p.m.: The patient had now again been insensible for sixteen hours, and the liq. ammon. fort. applied to the nostrils had no other effect than the vapour causing his eyes to suffuse, and eyelids to wink when applied to the skin of the arm or abdomen; under a cupping-glass, he did not appear to know it, although it blistered the integuments at the epigastrium. Pupils continued obedient to moderate light; pulse, after changing his linen (during which operation he was perfectly helpless and insensible), rose to 104, but the moving did not alter his respiration, which had become audible; the saliva, however, flowed from his mouth whilst he was supported in the erect posture; urine still escapes involuntarily; gentle perspirations over the whole body, and the extremities comfortably warm. The croton oil not

having operated, a turpentine enema was administered forthwith.

At eleven, p.m., I again saw him. He had been conscious for short intervals, resisting the removal of the strait waistcoat, saying "he was in fear of the Holy Ghost, and must keep it on." He was now again insensible, and the arms were strongly cataleptic, maintaining the most curious positions—pinching of the integuments, and the strong solution of ammonia when applied to the nostrils were disregarded. Pulse 100; carotids tranquil; respirations 26; tongue clean; discharge of urine involuntarily. The enema had not produced any evacuation of moment, so it was repeated, when it seemed to arouse him, exciting an hysterical effort to cry, and in about twenty minutes the injection brought away some scybala and grape husks, which had been swallowed, together with a quantity of healthy bilious dejection. He could not recognise any of his relatives, but he was uneasy at the church clock striking twelve.

28. Head and face hot and flushed, although the ice had been unremittingly applied; had slept occasionally for short periods; was insensible till raised in bed to change his linen, when he opened his eyes, took a few spoonfuls of beef tea, said he was in no pain, and again relapsed into his former state. The catalepsy of the upper limbs was more strongly marked in the evening than in the morning of this day. Injection repeated.

29. Throughout last night he continued much the same, the heat of the head having become excessive at the basilar region all round, but especially on the left side; the injection had fully evacuated the bowels; but at four, a.m., he was seized with violent convulsive gyrations, twisting him in a serpentine form from right to left, starting quite suddenly, and requiring the combined immense efforts of four men to confine him. When these convulsions ceased, he was still partially cataleptic in his arms; countenance indicated anxiety and pain; eyes sunken; head much cooler; pulse 104, but this and the action of the heart were evidently much weaker. He had, nevertheless, partaken freely of beef tea, and on one occasion asked for it. He had coughed several times, and expectorated a thick ropy mucus; great commotion in the bowels, and drawing up of the legs, as if gripped. After one of the convulsions during the day, he aroused and said, "I am not long for this world."

30. More conscious to-day; replied coherently to several questions; said he had no pain in the head, but "that he should have by and by;" asked to be washed all over in cold water, and had taken sufficiently of beef tea; had two convulsions during the night, and after each a little sleep, and this morning the catalepsy had disappeared; pulse 88; head cool; respiration natural; micturition involuntary; bowels had not acted. Ordered castor oil immediately.

31. Has been partially conscious at intervals since the last visit, and the gyrations had assumed a different character, drawing the head backwards, as in opisthotonos, and requiring great restraint, the whole body being strongly convulsed, without assuming any particular direction as before. The bowels had been copiously evacuated, but the urine still escaped without control; pulse 110, and feeble; tongue has as-

sumed a dry, dark brown coat; eyes much sunken; respiration 18, and abdominal; pupils still act well, and the skin is bedewed with perspiration; head cool; extremities warm. Had taken beef tea and a little wine and water.

I will not detain you longer than by remarking that, from this time, he had occasional lucid intervals, answering questions easily and rationally, and that the catalepsy had completely vanished, although he had a convulsion occasionally. On the day of his death (Sept. 2) he had slept soundly and been comfortably washed and changed; he was perfectly sensible for several hours, inquiring for and conversing with his relatives, when suddenly he begged them "to throw him out of window, or give him a razor to cut his throat, for the man with the spectacles on (one of the watchers) was endeavouring to read his thoughts." Even at this time he was rapidly sinking; his pulse scarcely perceptible, but the heart beat 160; copious transudations upon the face; tongue dark brown; sordes on the teeth, and extremities cold. He still refused all food and nourishment, assuring his friends he was not so ill as the doctors imagined, and he should yet recover. He was persuaded to drink a little wine, shortly after which he became quiet, and calmly expired at six, p.m.

Post-mortem.

After some little difficulty I succeeded in obtaining a post-mortem examination of the head only, sixteen hours after death. The body was excessively emaciated, indeed it was a mere frame of bones, and the countenance strongly betrayed internal wretchedness. The scalp was very tough, and the bones of the head exceedingly hard; the vessels of the dura mater were turgid with blood, looking blue and prominent, and so adherent was this membrane to the cranium that it was impossible to separate it entire; the sinuses were loaded with blood; the arachnoid membrane was firm and opaque, having a fluid yellow fibrinous secretion between it and the pia mater—this was particularly manifest over the convolutions along the mesial line of each hemisphere, and on the left especially; pia mater gorged with blood; substance of the brain throughout unusually firm, and with dotted points of various sizes and dark colored; ventricles contained about one ounce and a half of transparent serum; base of the brain and cerebellum highly congested; the medulla oblongata was hard and tough, requiring considerable force to break it down between the fingers, but it was devoid of dotted points.

REMARKS.

On reviewing this case there can, I think, be no doubt that the cerebral disease was of slow and insidious growth, produced most probably in conjunction with predisposing causes by his severe mental discipline and his utter neglect of the physical necessities of the frame, as regards food, cheerful recreation, and exercise of mind and body. The character of the insanity is, I believe, sufficiently well accounted for by the nature of his studies—religion and the serious responsibilities of his professional situation—and I am free to confess that the portions of brain to which phrenologists ascribe the functions of veneration were precisely the seat of the greatest vascular excitement, the most decided opacity and firmness of the arachnoid coat, and the most effusion between that mem-

brane and the pia mater—a most striking evidence of deranged function in connection with organic disease. We are justified, too, in my opinion, in pronouncing the catalepsy a symptom supervening upon mania, inasmuch as the former appeared and ceased whilst the latter was steadily running its course; we must remember, too, that the catalepsy was not extatic—that is, not that abstracted and intense contemplative excitement, or that rigid, statue-like muscular action requiring immense force to move the limbs or trunk from any given positions, but simply muscular action without volition as ordinarily exercised. Again, it may be that the asthenic state of his physical frame, induced as it was by severe study and scanty nourishment, might have so debilitated his nervous system as to modify the intensity of the cataleptic seizures, although it controlled not the violence of his convulsions, the one being continuous for days, more or less, the other sudden, powerful, but temporary. Another remark I would make is, that, although in this melancholy case the catalepsy was conjoined with a certain amount of hysteria, yet it more especially formed a part of the religious insanity, and hence the question arises, To what particular lesion within the cranium are we to attribute the supervention of the catalepsy? Will the induration of the brain and medulla explain this phenomena? Or, supposing the medulla spinalis throughout to partake of the same disease as the medulla oblongata, will that satisfactorily account for them? Again, I have not been able to satisfy myself but that during (to us) his unconscious state, and as far as external influences were concerned, he was utterly lost, yet from the rolling of the eyes, the motion of the lips, with occasionally indistinct utterance and apparent momentary recognition of a sudden question, I feel assured that his mental faculties were engaged upon the subject matters of his maniacal delusions. It appears singular to me, also, that with such excessive disease about the brain, the poor patient should have been visited with so many lucid intervals, during which he would be so rational and his general symptoms be so subdued that we were almost inclined to hope for the best; and this state of things continued up to the very day of his death, although the state of the encephalon, as developed after his decease, would have justified us in pronouncing raving delirium or complete insensibility. The disease of catalepsy, whether idiopathic or symptomatic, seems so rare and little understood that it would be useless to theorise more on the subject; but I will just summarily relate the treatment adopted.

It consisted of cold lotions and solid ice applied to the shaven head; relays of leeches to the temples and behind the ears, according to circumstances; blisters to the nape of the neck and between the scapulae; stimulating liniments to the entire spine; calomel and opium to affect the mouth, but which, although administered in small and repeated doses whenever practicable, failed to induce the desired effect; aperients, turpentine enemas, and, lastly, when the tongue became dry and brown, and symptoms of exhaustion manifested themselves, wine and ammonia. Whenever, too, any great length of time elapsed without food, and he persisted in refusing it, good beef tea was thrown up the rectum. The only suggestion in addition to the above I would make is—whether a cold

water douche over the body occasionally would be admissible, although I hope never again to encounter so formidable and pitiable a form of cerebral affection.

ON CYNANCHE LARYNGEA.

By JONATHAN TOOGOOD, Esq.,

Senior Surgeon to the Bridgewater Infirmary.

Cynanche laryngea sometimes is ushered in by an attack of common sore throat, and sometimes the two diseases are coexistent. Mrs. Burt, aged sixty-four, was seized with shivering, after exposure to cold, on Saturday morning, followed by fever and sore throat. The uvula and both tonsils were much inflamed and ulcerated; and in this state she continued to suffer much inconvenience until the following Wednesday morning, when she was so much relieved as not to require further attention. Her son being under my care at the time, I saw her at ten o'clock the same evening, when she declared herself free from all complaint, and told me that she had been sitting up at work the greater part of the day, and at that moment was preparing to assist in taking her son out of bed and making it for the night. On visiting him the following morning I was alarmed by hearing his mother, who slept in an adjoining room, breathing in a slow laborious manner, with a shrill or stridulous sound. I found that she had been attacked with cynanche laryngea early in the morning, and was suffering from pain, cough, fever, and sense of suffocation. General and local bleeding, with large and repeated doses of emetic tartar and afterwards of calomel, together with counter irritation, were immediately resorted to—indeed all the usual remedies were actively and most energetically employed for ten hours, when she died quite suddenly. The remedies produced languor and faintness, but no effectual relief, although a partial abatement of the most violent symptoms lulled me into a false security, and prevented me from adopting that course which, I believe, would have saved her life. Never did I more sincerely regret that the operation of bronchotomy was not performed; but the duration of the disease was so short that I did not feel myself justified in proposing it until some means had been tried. It terminated in a more sudden and unexpected manner than I was prepared for. The dissection proved that the disease was confined to the upper part of the tube, which was blocked up by flakes of coagulable lymph; and as the surrounding parts were all in a healthy state, there is every reason to believe that the operation would have been attended with complete success.

Although the operation did not succeed in the case which I am about to relate, it will be found an interesting one—the patient, after a partial restoration, having died of secondary asphyxia.

Mr. Honitall, aged fifty, had been suffering for some days from what was considered a bad cold, attended with hoarseness and sore throat, for which some domestic remedies were used. He became much worse about ten o'clock at night, when he sent for a surgeon, who bled him largely both generally and locally, and treated him very actively during the night without any relief of the symptoms. I saw him at five on the following morning, and advised

the immediate performance of tracheotomy, which he refused to submit to, but, rapidly getting worse, and gasping for life, he consented when in articulo mortis. But before the operation was completed he had ceased to breathe; it was persevered in, and artificial respiration performed, when, after a few minutes, to the great surprise of all around him as well as to myself, reanimation took place, he began to breathe freely, opened his eyes, sat up in the bed, and drank some tea. He continued in this state but a short time, was seized with convulsions, and expired.

If, in this dangerous disease, large bleedings and active remedies do not succeed within a few hours after its invasion, I believe the best course is to resort immediately to the operation, and not to wait until the powers of life are so far exhausted as to leave but little hope of success.

Bridgewater, Feb. 24, 1843.

IMPERFORATE VAGINA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Should you deem the following case of imperforate vagina of sufficient interest, you will oblige me by its insertion in your Journal.

I am, Gentlemen,

Your obedient Servant,

THOMAS BANCKS, M.R.C.S.

Stourbridge, Feb. 27, 1843.

In the month of April, 1842, Mrs. W—, aged twenty-eight, of masculine make, but well developed mamma, who had never menstruated, applied to me for advice. She stated she was in good health, had been married five months, but that no entrance had been effected by her husband. On examining the external organs of generation, I found a complete closure of the vagina, there being no opening but the orifice of the urethra, which was much dilated (and readily admitted my finger into the bladder) by repeated attempts on the part of the husband to force an entrance with the finger. I at first thought the integuments only might possibly be the obstruction, and suggested to her the necessity of an operation, which she readily assented to; indeed, she stated her willingness to undergo any operation that would afford a chance of relief. Having evacuated the rectum and bladder, I commenced an incision immediately below the orifice of the urethra, and carried it on for three inches towards the anus, avoiding the urethra by keeping a catheter up against the pubis, and, carefully dissecting as I approached the rectum; I continued my incision inwards and upwards for about two inches and a half, until I found the rectum and urethra so closely approximated that I deemed it advisable to desist, having fully satisfied myself there was an entire absence of the canal of the vagina and, I believe, of the uterus also, as it could not be felt either through the rectum or bladder. The woman had never menstruated, or had any bad symptoms when that secretion should have taken place, and the bones of the pelvis, particularly the inferior outlet, had all the characteristics of the male pelvis; one artery only was divided and secured, the

wound soon healed, and the woman shortly after leaving the neighbourhood, I was unfortunately unable to obtain a sketch of the parts, as I wished to have done, before and after the operation. The woman persisted in marrying, in defiance of the wishes of her mother and other friends, who were aware of the physical disability to consummate the marriage from the malformation which existed.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, MARCH 4, 1843.

The reign of monopoly, so long enjoyed by the medical corporations, is rapidly drawing to a close. Whatever may be the nature of the medical reform announced by Sir James Graham, it is certain that the privileges and pretensions of the incorporated monopolists will be considerably lowered and curtailed, either by modification of their charters or by (as we sincerely hope) some general enactment comprising the whole profession and regulating it throughout the United Kingdom.

Prudent men generally endeavour to set their houses in order as the day of final account approaches. Not so the corporations. They have been so long accustomed to work in the dark, that now, at the eleventh hour, their lamps are without oil, and at the very moment when they should be prepared to invite public scrutiny to their most trifling acts, their councils are divided, their conduct vacillating, and their deeds only calculated to excite contempt or indignation.

Some ardent reformers of the "go-ahead" school will, perhaps, rather rejoice than grieve at these symptoms of weakness and approaching dissolution; but those who still entertain some fragments of respect for the institutions with which they have been accidentally connected, must deplore the strange want of consistency and regard for the respectability of the profession which characterises certain recent measures of the Colleges of Physicians and Surgeons in London.

One of the evils against which the voice of the profession has been most loudly raised, is the unnecessary multiplication of titles and the invidious distinction of grades emanating from the various licensing bodies. In a profession, indivisible from its nature, uniformity of education and qualification should exist. This proposition is so simple and evident that we deem it superfluous to adduce any argument in its support. Now, if the corporations be unable to carry out any uniform scheme of professional education, and if "grades" be necessary to the very existence of the medical commonwealth in this custom-ridden country, some effort, at least, might be made to lessen the obnoxious system of gradation—some desire shown to draw the profession together in the bonds of unity and

brotherly love. The reverse, however, is the case. New grades are established, and the compacts entered into for the purpose of equalising, so far as circumstances permitted, a large portion of the profession, have been wantonly and shamelessly violated.

The College of Physicians of London is a body so utterly insignificant in every point of view—bankrupt in reputation as well as in purse, and leaning, for its last support, on the fragile reed of ministerial favor—so insignificant, we repeat, is this body, that many of our readers will not understand our allusion to the new grade recently introduced amongst us. Be it known, then, to the half dozen persons whom it may concern, that the Royal College of Physicians has instituted an indescribable genus of practitioners, denominated members. In addition to fellows, candidates, inceptor-candidates, licentiates *intra urbem*, and licentiates *extra urbem*, we have "members." All we know of the qualification required from these gentlemen is, that they should be forty years of age; arrived at this happy period of manhood, they undergo some process at Pall-mall, which is concealed from the uninitiated, and are thence sent forth, under *false* colors, to delude and doctor her Majesty's lieges.

The term *false* is not too strong a designation for this new class of dignitaries; they have no right whatever to the title of M.D., yet are called Dr. in the lists of the college, where their names are indiscriminately mixed with the legitimate members of the college. In the abstract, we do not object to the principle of admitting practitioners of forty years of age to an examination and enlisting them amongst the members of any corporate medical body. Under an uniform system of government, and above all with a strictly conducted public examination, this plan might not be objectionable; but in the present posture of affairs it is one which no thinking man can for an instant defend. What necessity, we would ask, exists for the institution of a new grade in the profession? If the college desire to be liberal, why not simplify the matter by making licentiates of these gentlemen? What examination do they undergo?—if the same as the licentiates, why create an invidious distinction?—if different, how can the college justify itself against the charge of sending forth a class of inferiorly qualified men? But, it may be rejoined, the qualifications of these gentlemen to practice are fully tested by examination at the college. Were that examination *public*, the answer might pass; but constituted as it is, and conducted as it has been, the college cannot expect the public to place any great degree of trust in the wisdom of its acts or the purity of motives whence these acts have emanated. When a show of liberality was manifested in the election of certain fellows, we all know how the supposed honor was bestowed as a reward on recreant reformers; and we have no proof to show—no reason to

conclude—that the “members” of the college are not admitted under a somewhat similar principle.

The college, we believe, have been engaged for a couple of years in the manufacture of this new grade; how far the plan may have contributed to recruit the exhausted finances of the College of Physicians we cannot tell; but its effect on the small portion of the profession connected with that college may be estimated from the following precious document:—

This missive has been, we understand, extensively distributed as a circular in the neighbourhood of Scarborough, and we publish it at the request of some members of the profession in that locality, who are rather uneasy at the idea of having such a *confrere* as the president of the college is about to bestow on them.

“I take the present opportunity of returning my sincere thanks to those friends in various parts of Yorkshire who have patronised me since my commencement as a chemist in Scarborough, and beg to inform them that I have arrived in London for the purpose of graduating for a physician.

Some time ago I received a letter from Sir Henry Halford, Bart., M.D., *President of the College of Physicians*, giving me the necessary instructions how to proceed; and, in conformity with the advice contained therein, I have placed myself in the King's College and Hospital, London (in medicine, under the eminent Dr. Budd, F.R.S.), where it is my intention of remaining until my object is accomplished.

Many inquiries having been made as to the time of my returning again to Scarborough, I find, on reading over the *curriculum* of studies enjoined by the College of Physicians, that most of the subjects therein enumerated I have been acquainted with for some time, and which, like others who have preceded me in every age, I have taught myself by dint of perseverance in hard study for a period of above twelve years, and more ardently so since the receipt of Sir Henry's letter, in March, 1839; and neither I nor my examiners consider it at all necessary to waste any time in attending lectures on subjects which I already understand, and, therefore, I expect to finish my studies in London in a few months.

Those persons who may have occasion to write to me on professional or other matters, may address their letters either to Scarborough, from whence they will be forwarded to me, or to the college, in London, where they will be attended to.

CHARLES ROOKE.”

Mr. Rooke is evidently a gem of the first water; he does not inform his constituents whether his friend Sir Henry is about to make a fellow of him, or merely a member; in either capacity, however, he will shed unfading lustre on the last days of the aristocratic institution which is about to receive him into its bosom

Macte virtute o Rooke; you have begun well, and unless the benevolent views of Mr. Fitzroy Kelly frustrate your aspirations, you may one day occupy an elevated, though not envied, position in society. Let your motto be “*Sic itur ad astra.*”

LEEDS GENERAL INFIRMARY.

[*Practice of Mr. T. P. Teale.*]

EXCISION OF THE UPPER JAW.

(Reported by Mr. Radcliffe, Dresser.)

Samuel Rhodes, of Knaresborough, aged seventeen, was admitted into the Leeds Infirmary January 11, 1843, on account of a tumor of the palate. He is of robust appearance, and has enjoyed excellent health from infancy. The tumor, of the size and form of half a pullet's egg, occupies the greater part of the palate, and projects into the mouth. It extends transversely from the right alveolar ridge, to within half an inch of the left molar teeth, and in the antero-posterior direction from a little behind the incisor teeth to the soft palate. The right alveoli and teeth of the upper jaw are protruded outwards, so as not to correspond with their antagonists below. The right cheek and lip are a little elevated, but there is not any unnatural prominence of the canine fossa. The floor of the right nostril is a little raised; the tumor is generally firm and resisting to the touch, but slightly elastic in the centre; near the right alveoli, for a short distance, it is evidently covered with a thin shell of bone. The patient does not experience any difficulty in swallowing, but his speech is thick, indistinct, and laborious.

He states that, during the harvest of 1841, his head and face were severely injured by a cart-wheel. About three months afterwards, whilst at dinner, he first perceived a tumor in the palate of considerable magnitude. He states, however, that for some time he had “spoken thick.” Although he immediately adopted surgical treatment, the tumor for two or three weeks continued to increase in size; afterwards it slowly and gradually diminished, until about two months since, when it again began to enlarge, and has progressively increased in size until the present time. He has never experienced pain in the tumor. The serious evils which would result from the progressive increase of the tumor, and the futility of remedial treatment, having been explained to the patient, his consent was readily obtained for the removal of the diseased structures by excision.

Operation.—January 13, One, p.m. The patient being seated in a chair, Mr. Teale commenced the operation by making a semicircular incision of the palate along the posterior and left borders of the tumor. An incision was then made from the nasal process of the right superior maxillary bone along the side of the nose, and through the upper lip in the median line. By a slight touch of the knife, the flap formed by the left lip was separated from the bone as far as the alveoli of the left second incisor and canine teeth, which had been previously extracted. The bistoury was next introduced within the mouth, and its point pushed through the substance of the cheek, so as to penetrate the skin over the middle of the

zygoma. The incision of the cheek was then completed by drawing the bistoury downwards to the angle of the mouth. The flap, consisting of the right cheek, was now dissected upwards, so as to expose the superior maxillary and malar bones, and by the handle of the scalpel the contents of the orbit were detached from its floor. A notch having been made by a saw in the left alveoli, and a groove in the malar bone, Mr. Teale proceeded to divide with the bone scissors the left side of the bony palate, the nasal process of the superior maxillary bone with the floor of the orbit into the spheno-maxillary fissure, and the malar bone. The instrument being then pushed behind the tuberosity of the superior maxillary bone, and used as a lever, the remaining osseous attachments were overcome. The superior maxillary bone and tumor being thus loosened, the infraorbital nerve and other soft parts were divided from above downwards, until the soft palate was reached, which was carefully preserved, and allowed to remain attached to the pterygoid process. The time that elapsed from the commencement of the first incision to the complete detachment of the bone was five minutes and forty-five seconds.

The patient, who had borne the operation with the greatest fortitude, was now removed from the chair and placed in the recumbent posture. The hæmorrhage was very trifling. Two small vessels in the flap were all that required ligature. The cavity being filled with lint, the flap was accurately adjusted by several points of interrupted suture and one twisted suture at the angle of the mouth. No dressing was applied. The patient, on being removed to bed, did not appear much exhausted. An opiate was administered.

On examining the tumor, Mr. Teale ascertained that it was situated between the bony palate and the periosteum, and consisted of a firm fibrous cyst intimately attached to the periosteum, but not adherent to the alveoli or to the bony palate. The latter was pushed upwards by the tumor so as to elevate the floor of the antrum and right nostril. The antrum was free from disease. The cyst contained a white pulpy substance of the consistence of brain.

Ten, p.m. Reaction fully established. He has slept two hours. Swallows cool tea without difficulty.

Jan. 14, Nine a.m. Has passed a restless night. Slight blush of erysipelas on right side of the face; pulse 96. Linen wet with tepid water to be applied to the face; half an ounce of castor oil to be taken.

Nine, p.m. Bowels freely evacuated; the whole line of the incisions has adhered; face more tumid and red. Half a grain of acetate of morphia to be taken at bedtime.

15, Morning. Has had a disturbed night. Erysipelas more extensive; thirst; pulse 120. Sutures removed; twelve leeches to be applied and warm fomentations; castor oil.

Evening: Inflammation of the integuments much diminished; bowels open. Repeat the morphia.

16. Better. Erysipelas has subsided; pulse 100, soft; suppuration freely established in the mouth; portions of lint are from time to time becoming loosened and removed.

17. Very comfortable.

18. The adhesion at the ala nasi has a little given

way. The cheek to be supported by a strap of adhesive plaster.

From this time he proceeded favorably, with the exception of two slighter returns of erysipelas.

Feb. 16. Convalescent. He now sits up in his ward, eats mutton chops, and appears quite well. Very little deformity exists except when he smiles.

Jane Cran, the young woman whose upper jaw was removed by Mr. Teale at the Leeds Infirmary in February, 1842, is now in perfect health.*

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

February 14, 1843.

Dr. ADDISON in the Chair.

An Account of an unusually Large Biliary Calculus, voided by the Rectum. By JAMES ARTHUR WILSON, M.D., Physician to St. George's Hospital.

The patient in this case was a gentleman, aged seventy-three, of temperate habits, and who had resided in the West Indies the greater part of his early life. The calculus was voided with fluid fæces from the rectum, after many days of exhaustion by hiccup and vomiting. The early symptoms were constipation, loss of appetite, and sickness, succeeded by jaundice. Within a fortnight the urine and fæces recovered their natural appearance, the jaundice disappeared, and the patient resumed his usual pursuits. Shortly, however, all the urgent symptoms returned, with frequent severe hiccup, and for two days the case seemed to be verging to a fatal termination. On December 17 the bowels, long previously inactive under large doses of purgatives, began spontaneously to relieve themselves, and gave passage to a calculus as large as a full-sized walnut, when all the urgent symptoms gradually and entirely subsided.

The author alludes to another case which occurred at St. George's Hospital, in which, after death, "a round calculus, as large as a walnut," was found impacted in the ductus communis hepaticus. He concludes by observing that there is an inference from these cases of biliary concretion that may with advantage be remembered in our diagnosis of jaundice and constipation—viz., that the progress of gall-stones through the ducts (even when inordinate in their dimensions), is not disproved by the absence of pain in the epigastrium.

Researches into the Connection existing between an Unnatural Degree of Compression of the Blood contained in the Renal Vessels, and the Presence of certain Abnormal Matters in the Urine. By GEORGE ROBINSON, M.R.C.S.L. [Communicated by MARSHALL HALL, M.D., F.R.S.]

The author commenced by briefly enumerating the advantages which the kidney presented for an experimental investigation of the laws regulating effusion. This organ could be readily exposed in the lower animals, without the infliction of much pain or injury, and its artery, vein, and duct, separately secured by ligature. The importance of Mr. Bowman's recent discoveries, in enabling us better to understand the mechanism of the process, was also alluded to.

The experiments, thirty-four in number, were di-

* See Provincial Medical Journal, March 26, 1842.

vided into two chief classes; the first, being intended to illustrate the peculiarities of venous obstruction, contained the results of twenty experiments; the second, having for its object the explanation of some of the effects of increased determination of blood, contained fourteen experiments. The experiments are given in detail, but our space will only allow us to state the conclusions the author draws from them.

After some remarks on the morbid appearances met with in certain of the above experiments, and which seemed to be analogous to changes occasionally occurring in the human kidney, the paper concluded by expressing the author's opinion—

1. That the process of the effusion of albumen and lymph, through the coats of the vessels of the living body, is dependant on and regulated by the degree of the compression of the blood contained in those vessels.

For the production of an intense degree of compression, the co-operation of two essential causes is required; the momentum of the arterial blood derived from the contractions of the ventricle constitutes the force which produces the compression; but as a counter-resistance is required before the latter state can occur, it is only when some obstruction to the free passage of the blood through the smaller vessels exists that the effects of undue compression are perceptible.

As the amount of the momentum of the arterial blood, and the completeness of the obstruction vary in different instances, so will the nature of the effusion.

2. That simple compression of the blood in its smaller vessels will cause the exudation of liquid albumen, of coagulating lymph, and the escape of blood. And as both the essential causes of undue compression are known to exist in inflammation, it is but reasonable to conclude that the primary effects of the latter, which are identical with those of undue compression, are the mere consequences of that physical cause.

3. That there is no relation between the composition of the effused matters and the extent of the dilatation of the coats of the vessels, as measured by the quantity of blood they contain. To establish this point more clearly, part of a table, showing the relative weight of the healthy and engorged kidneys, and the composition of the urine, was read.

4. That a gradually increased quantity of blood may be directed to the vessels of a particular organ without causing any unnatural compression of that fluid.

5. But the concluding experiments show that if the quantity thus determined be considerably and suddenly increased, then some of the effects of undue compression of the blood will be produced.

ANATOMICAL SOCIETY OF EDINBURGH.

December 20, 1842.

TUBERCULAR MASSES IN THE PERICARDIUM.

Dr. Peacock showed a beautiful specimen of tubercular matter deposited in masses in the reflected and attached layers of the pericardium. They varied in size from that of a pin's head to that of a hazel nut. The bronchial glands were greatly enlarged and tuberculous; but no disease was detected in any other part of the system. The patient was a female, aged twenty-eight years.

CHRONIC INFLAMMATORY SOFTENING IN THE RIGHT CEREBRAL HEMISPHERE.

Dr. Bennett presented the right cerebral hemisphere removed from the body of a man who had been laboring for eighteen months under hemiplegia of the left side. In this case there was softening situated in the right cerebral hemisphere, a little external and anterior to the ventricle, and about the size of a hazel nut. It presented the peculiar character denominated chalky-milk (*lait de chaux*) by the French, consisting of minute granules floating in a thick fluid. It contained numerous exudation corpuscles, perfectly round, generally about 1-50th of a millimetre in diameter, filled with granules about 1-1000th of a millimetre in diameter. The regular size of the exudation corpuscles and granules formed a strong contrast to the variations existing in this respect as observed in other kinds of softening.—*Edinburgh Monthly Journal*, February, 1843.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

Jan. 4, 1843.

POISONING.

Dr. Christison read an account of some obscure cases of poisoning.

The first case, to which this section of the paper was confined, was one of death, supposed to have been caused by spirits accidentally poisoned. Nine masons, who had been working hard in a quarry, during a hot day, from an early hour in the morning until one o'clock, drank at that hour, in the course of a short period, seven half-mutchkins, or about fifty-six ounces, of a sort of "gin," manufactured by a travelling spirit-dealer, who sold it to them on the spot. None of them seemed to have had less than two glasses, or more than four—that is, from four to eight fluid ounces. They had no food after an early breakfast, except a little bread and cheese, which one of the party divided among a few of them just before they took the spirits. No particular taste was observed in the spirits at the time, though one of the party at first demurred to drinking it because it became milky with water. Two of the men, who had at least their full share, experienced no particular effect. Three others seemed to have also experienced little effect, but some headache in the evening. Two others, observing the serious effects produced in the subsequent cases, made themselves vomit, and also experienced subsequently nothing but in considerable headache. The seventh felt the liquor "go to his head" immediately, and continued to feel "stupid" for the whole evening. The eighth, who had taken four glasses, became in ten minutes suddenly stupid, and speedily quite senseless, in which state he remained for some hours, till he was roused by emetics and stimulants, and subsequently he had pain in the stomach for the rest of the evening, and all next day sickness and drowsiness. The ninth, who had taken certainly not more than three glasses, possibly only two, fell down suddenly insensible five minutes after having taken his last glass, and in five minutes more he expired. This was a man of sixty-three, in good health at the time, not intemperate, yet accustomed to take his glass occasionally, like other workmen of

his acquaintance. He was one of those who had a little bread and cheese before the drinking-match commenced. The body was very carefully examined under authority of the sheriff of the county where the accident happened, but no morbid appearance whatsoever was found.

The spirit-dealer's stock was seized for examination. The "gin" he sold to the men had a juniper odor and taste, without any bitterness or ratafia flavor, and a careful chemical analysis did not indicate the presence of any hydrocyanic acid, or of any vegetable poison which could cause such an accident as that described above. He stated that his gin was made with whisky, oil of juniper, and tincture of sweet bay. Whisky found in his house was ascertained to be free of poison. A bottle alleged to be oil of juniper was really that substance, mixed with a little spirit. Another bottle, represented to contain a tincture of sweet bay leaves, had the taste and odor of the leaves of *laurus nobilis*, and was free of hydrocyanic acid. The plant from which he said he gathered the leaves grew in his own garden, and was ascertained to be really the sweet bay, or *laurus nobilis*. There was, therefore, not a single circumstance to warrant the presumption which actually arose at first, that the man had used by mistake the leaves of the common bay, or *cerasus laurocerasus*, the cherry-laurel.

A careful inspection of the whole particulars, made by the law authorities after consultation with the author, did not throw any farther light on this extraordinary case. The author, admitting its nature to be very obscure, was inclined on the whole to the opinion that the sole agent was alcohol, and that its diversified effects on the men depended on obscure constitutional circumstances.

STAMMERING.

Dr. Abercrombie communicated "Observations on the Impediment of Speech, commonly called Stammering." When Dr. Abercrombie's attention was first directed to the subject, the following facts attracted his notice:—

I. He observed that stammerers never stammer in singing.

II. The individual on whom his first observations were made, did not stammer when he was obliged to speak in a louder tone of voice than usual, as when conversing in the midst of a noisy crowd, or in a carriage on a rough road.

III. The precentor of a church came under his notice who stammered in common conversation, but showed no hesitation when reading out the line, as it is called, which was done in a peculiar high-pitched tone of voice, such as is usually employed by precentors for that purpose.

IV. He found that stammerers have no difficulty in performing any of those movements of the lips and the tongue, by means of which the consonant sounds are produced, when they are directed to make these movements simply—that is, without any reference to speech.

V. He observed that in some stammerers the difficulty is not confined to the consonant sounds in which the peculiar action of the organs of speech is more directly exerted, but extends to other sounds, in which these organs are little, if at all, concerned, such as the simple aspirated *h*, as in the words *hap-*

piness, holiness, &c. In one individual, indeed, who was treated successfully, he found that he often hesitated at such words as these, long after he had overcome every difficulty respecting the consonants.

By such facts as these he was led to the conjecture that the affection does not depend upon any defect in the organs of speech, properly so called; but is rather connected with a deficiency in the management of the voice, and he thought it would be found that, when a stammerer gets into that peculiar state of hesitation which is familiar to every one who has witnessed it, he is endeavoring to speak when he has no voice—that is, when the lungs have become emptied of air, or nearly so.

According to these views, the principles on which the cure of the affection may be accomplished appeared to be the following:—In actually accomplishing a cure, everything depends upon the perseverance of the patient himself after the principles have been explained to him.

1. To direct the attention of the individual to the three distinct parts of which the function of speech consists—viz,

1. A full and continuous current of air proceeding outwards from the lungs.

2. The formation of this into inarticulate sound, or voice, by the action of the larynx.

3. The formation of this into articulate sound, or speech, chiefly by certain movements of the lips and the tongue.

He soon perceives that he has no difficulty in performing any of these actions, when they are thus made separate objects of attention; and in this manner he is led to understand that his affection does not depend upon any defect in any of the organs of speech, or a difficulty of performing any of the processes of which the function consists; but in a certain want of harmony among these processes which has grown into a habit. He is easily made to perceive, for example, that he has no difficulty in performing that motion of the lips by which is formed the sound of the letter *b*, then why should we have any difficulty in saying *bee, boy, bell, &c.* When the formation of each letter is thus made a separate object of attention, or a distinct voluntary act, it is remarkable to observe how the difficulty seems to vanish; and, by continued attention in this manner, the habit is gradually broken, in as far as concerns this part of the process.

II. The second, and principal part of the treatment is, to exercise the individual in the habit of never attempting to speak without having a FULL AND STRONG CURRENT OF VOICE. He may be made sensible of the effect of this by making him read in a strong, loud tone of voice, as if he were calling to a person at a distance, or in a tone resembling singing or chanting, or in the peculiar tone of a precentor, in reading out the line, which has been already referred to. When he has thus been made to understand the principles on which the removal of the affection is to be conducted, the farther treatment consists in a course of exercises calculated to give him a full command of his voice, and so to correct the habit which he has acquired, of speaking, or attempting to speak, without sufficient voice. For this purpose he should be made to read aloud several times a-day, from an author whose style is somewhat declamatory. In doing so, he

should be made to read in a high-pitched tone, and to stop frequently and take a full breath, so as to have the voice thrown out with a force beyond what is required for ordinary reading or ordinary conversation. With this view it is necessary to make him stop and take a full inspiration much more frequently than would be required by another person; for it is in this part of the process that we are to trace, in a great measure, the bad habit which he has acquired, and the opposite habit which he is required to cultivate. In particular, whenever he feels the tendency to hesitate at a word, he is to be taught to stop instantly, take a full breath, and then try it again. He will be immediately sensible of the effect; and a succession of voluntary efforts of this kind will be gradually formed into a habit, calculated to correct the injurious habit, in which, I believe, we are chiefly to trace the pathology of stammering.

In a note appended to this paper, Dr. Abercrombie remarked that, since his observations were written, he had found that the same principle respecting the influence of respiration in this affection had been pointed out by Dr. McCormack, of Belfast, in a small volume published in 1828.—*Edin. Monthly Journal*.

PATHOLOGICAL SOCIETY OF DUBLIN.

Session 1841-2.

CHRONIC RHEUMATIC ARTHRITIS OF THE TEMPORO-MAXILLARY ARTICULATION.

Mr. Smith presented a series of specimens (eleven in number) illustrative of the alterations produced in the parts entering into the composition of the articulation of the lower jaw by chronic rheumatism. In seven of them the disease engaged the articulation upon each side; and in four the subjects were edentulous. Previous to describing each specimen, Mr. Smith made some general observations upon the disease. He remarked that, in the majority of instances, it attacked those of advanced age, and was double, while the analogous disease of the hip-joint was usually confined to the articulation of one side. When it attacks those of middle age it is generally more rapid in its progress, accompanied by more severe pain, and is more liable to implicate the neck of the condyle and ramus of the jaw. In some cases a bony tumor can be distinctly felt beneath the zygoma, immediately in front of the external meatus, and constituted by the enlarged condyle; the lymphatic glands, on the surface of the parotid, and behind the ear, are also, in these cases, prone to enlargement. The pain which accompanies the disease is not usually severe, but is more or less constant, and is influenced by the state of the weather; the face is generally distorted, the nature of the distortion varying, according as one or both articulations are affected. When it is confined to that of one side, and has existed for a considerable period, the mouth becomes crooked, the affected side of the jaw being drawn forwards and towards the opposite side, so that the teeth of the lower jaw, upon the sound side, project beyond those of the superior maxilla; but when the disease is symmetrical the entire of the lower jaw is drawn forwards, and the chin projects, just as it does (though from a different cause) in the edentulous subject. Mr. Smith (having alluded to the close resemblance between this

affection and chronic rheumatic arthritis in other articulations) next entered into a minute detail of the anatomical characters of the disease. He described the articular surfaces of the glenoid cavity and condyle as being destitute of investing cartilage, and presenting an irregular and scabrous aspect; the appearances, of course, varying, according as the disease was more or less advanced; in some cases the glenoid cavity is increased in depth; in others it is rather shallower than natural; sometimes circular, sometimes oval, in form. It is, in many instances, where the disease has been of long duration, increased as to its circumference; this enlargement being accomplished at the expense of the horizontal and transverse roots of the zygomatic arch, more especially of the latter, which, in all cases, is to a greater or less extent absorbed. It is upon the destruction of this transverse root, or articular eminence, as it has been termed, the distortion of the countenance depends; for, when its removal by absorption is to a certain extent effected, the external pterygoid muscle then draws the jaw forward and to the opposite side, where but one articulation is diseased, and the muscles of both sides act in drawing it directly forwards when the destruction of the articular eminence is symmetrical; the extension of the disease inwards, towards the middle line of the base of the skull, is limited by the spine of the sphenoid bone, and the speno-temporal suture, and posteriorly it ceases at the Glasserian fissure, the non-articulating portion of the glenoid cavity never being implicated in the morbid action; the alterations of the condyle correspond pretty accurately to those of the glenoid cavity; sometimes it is enormously hypertrophied, its upper surface being flattened and enlarged in all its diameters, while in other cases it assumes a conical form, and is always rough and destitute of cartilage. Mr. Smith remarked that the changes which the bones suffered as to form were as numerous and as varied as in the analogous affection of the hip-joint; with respect to the state of the soft parts connected with the articulation, he stated, that in the progress of the disease the inter-articular cartilage disappeared; he had not, as yet, found foreign bodies in the articulation; and in only one specimen anything like porcellaneous deposit. Mr. Smith exhibited drawings and casts illustrative of the deformity of the countenance in this disease; and, in conclusion, contrasted it with that which accompanies the congenital luxation of the lower jaw, a specimen of which he had exhibited at a former meeting of the society.

CIRRHOSIS OF THE LIVER.

Dr. Law produced the recent specimen in this case, taken from a man, aged fifty, laboring under ascites. The heart could be felt pulsating under the left clavicle, and paracentesis was performed, which was followed by peritoneal inflammation; serum, with floculi of lymph, was found in the abdomen, and the convex surface of the liver was adherent to the diaphragm; the liver was in the state of cirrhosis. Dr. Green, at a former meeting, had detailed the various opinions on the pathology of this affection. It was now known that Laennec's opinion was incorrect. The irregularly rounded bodies are the acini surrounded with a fibrous contractile tissue; on this change in the organ dropsy ensues; this lesion is not

peculiar to the liver; it occurs in other organs, producing analogous changes; wherever it occurs it affects the common parenchymatous tissue; it has been observed in the kidney. In the lungs it produces the change which Dr. Corrigan had described under the name of dilatation of the bronchial cells. It brings the liver to the state of the organ of some of the lower classes of animals, as the cephalopoda.

CIRRHOSIS OF THE LUNG.

Dr. Law exhibited two specimens of this disease; one was from a man, aged fifty, who had labored under dyspnoea for ten months before his admission into the hospital. The left side of the thorax, both anteriorly and posteriorly, sounded dull on percussion, and a muco-crepitating râle was distinctly audible; after some time the right lung became affected in the situation of the mammary region; there was hæmoptisis; and a crepitus was evident in the right lung. When the body was examined, the left lung was found to be covered with a very dense false membrane, especially at its inferior lobe. The parenchyma was very dense, and some osseous particles could be felt in the pulmonary tissue. The right lung was free from disease superiorly, but there were tubercles in the middle lobe, and in the inferior dense structure of the parenchyma.

The other specimen was from a boy, aged ten. There was empyema, but circumscribed by adhesions, so that only a portion of the lung was exposed to its effects.

Dr. Law observed that he had already mentioned Laennec's mistaken views of the pathology of this affection. He had, himself, so far back as 1830, connected it with hæmatemesis, and with the circumstances of *diminished size with increased specific gravity* of the organs affected by it. He might allude, also, to the progress made in its investigation by Cruveilhier and Carswell, and to Dr. Corrigan's success in explaining the enlargement of the bronchial cells, which had already been brought under the notice of the Society.—*Dublin Journal of Med. Sci.*, March 1843.

MEDICAL REFORM.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The Right Hon. the Secretary of State for the Home Department has now formally announced that he will introduce a bill into the House of Commons for the future regulation of the medical profession. For this announcement we ought certainly to feel very grateful, and to give Sir James every assistance in our power to enable him to fulfil his promise. There is an old saying, that one volunteer is worth a dozen pressed men; in the present instance, Sir James has volunteered his services, and embarked in a cause in which three or four others have broken down before they had brought their measures to the second reading. I have no misgivings on this score on the present occasion; I have full confidence in Sir James's ability, willingness, and power, to carry a bill through the House of Commons for the purpose of reforming the medical institutions of the country, and the subject is one somewhat connected with the Home-office, as I believe the Home

Secretary has a controlling power over all matters affecting the public health. He is, therefore, somewhat involved in the question of medical reform, and in securing the efficiency and promoting the improvement of those to whom is entrusted the important and indispensable faculty of preserving and restoring the health of the community.

Although I have no misgivings as to Sir James's good intentions, or his influence in the House of Commons to carry any bill that he may bring forward for the improvement of the present state of the medical profession, I have my doubts as to whether he is sufficiently practically acquainted with the subject, and the various grievances under which the profession labors, and the abuses of the present system, which call so loudly for legislative interference, so as to enable him to frame a bill that will give general satisfaction to the profession; and unless the members of the profession speedily rouse themselves, and shake off that lethargy and apathy which seem to pervade them, I very much fear that the forthcoming measure will be one designed to benefit the corporate members of the profession more than the great body of general practitioners. Depend on it, we shall never get any effective measure of medical reform unless we set to work ourselves.

The object of this letter is, if possible, to induce my medical brethren to bestir themselves; if there ever was a time for extraordinary exertion, it is the present. It will be useless for the Right Hon. Home Secretary to bring his measure before the House, unless he is supported by the whole body of the profession; this support can only be rendered by petitions. It is not enough for public bodies and corporate institutions to send petitions; there should be petitions sent to both Houses of Parliament from every town in the United Kingdom where there is a medical practitioner. I hope the council of the Provincial Medical and Surgical Association will take the lead; I know of no public medical body so likely to influence the members of the profession as they. There should also be meetings of the councils of the various district branches, for the especial purpose of petitioning, and instructing their representatives in Parliament on the subject of medical reform. Before we can expect the legislature to apply any remedy, or to pass a bill for the improvement of the medical profession, we must endeavour, by all the means in our power, to inform them of the evils and abuses existing in the present state of medical society. Something should also be done to enlist the public on our side. Whatever is calculated to promote and improve the science of medicine, or raise the character and respectability of the medical practitioner, must be useful and beneficial to the community at large. Medicine is an art depending much on public opinion and estimation, and those who are engaged in the practice of it are, more than any other set of men, the creatures of fashion and caprice, and yet there is no learned body of men who less obtrude themselves on the public. This, I think, arises from there being no honors or rewards conferred on them by the government at the expense of the public. The only distinction which really elevates the members of our profession is the honorable but unostentatious pre-eminence conferred by intellectual superiority. There

is no woollack, mitre, or coronet, in reserve for us; but these distinctions await and are attainable by the humblest member of the other learned professions. Whatever the prospective measure may be, whether of a distinctive or a preventive character, I am very anxious that we should be united, and prepared, *if good*, to give it our most cordial support, and, *if bad*, to exert ourselves to the utmost in opposing it. I have in no way alluded to the numerous evils the members of the profession have to complain of, nor to any remedy that I may consider likely to remove them, thinking it best to wait and see the nature of Sir James's bill. But there is one increasing evil which ought not to be overlooked, and in our petitions should form a prominent part: it is the very great power given to the poor-law commissioners over the medical profession. That a body of men possessing so many scientific and learned acquirements should be subservient to the poor-law commissioners, is shameful. Vaccination and registration both legitimately, in my opinion, belong to the medical profession, and I trust we shall soon see the control of them placed in their hands.

I am, Gentlemen,

Yours, &c.,

Bath, February, 1843.

GEORGE KING.

IRISH MEDICAL CHARITIES.

[The following memorial was forwarded on the 31st of January last to Sir Robert Peel, from the council of the Provincial Association. We now publish it at the request of the council.]

(COPY.)

To the Right Hon. Sir Robert Peel, Baronet, First Lord of the Treasury, &c., &c.

SIR,—We, the undersigned members of the Council of the Provincial Medical and Surgical Association, beg permission to express the deep interest we feel in every measure of legislation designed to provide medical aid for the poorer classes of the community in any part of the United Kingdom; and very respectfully to lay before you our sentiments and opinions with respect to a bill brought in at the close of the last session of Parliament, by the Chief Secretary for Ireland, for the purpose of regulating and remodelling the Irish medical charities.

Although fully aware of the existence of some defects in the present system of medical relief in Ireland, we venture to assert our belief that certain official statements, contained in the report which has suggested the leading provisions of the proposed measure, are exaggerated, partial, and erroneous; that the institutions in question have been found, on the whole, well adapted to afford medical aid to the poor of Ireland; and that, if placed under medical inspection and management, they may be rendered perfectly efficient, not only for the direct relief of the sick, but for the prevention of a vast amount of misery and destitution among the industrious classes.

We submit that it is both unnecessary and inexpedient to remove the present governors of these charities, for the purpose of substituting other governors subject to the control of the poor-law commissioners.

Having observed the numerous and serious defects of the arrangements, which have been in force since

the year 1835, for supplying medical relief to the poor of England and Wales, we are driven to the conclusion that the poor-law commissioners are unfit to be entrusted with the regulation of any medical institutions, or with the administration of any enactments which may affect the character, position, and interests of the medical profession.

We, therefore, beg leave earnestly to request that the bill, already introduced into Parliament, may be reconsidered by her Majesty's government; and that the petitions and suggestions of the grand juries of many Irish counties, of the governors of the medical charities, and of the most eminent members of the medical profession in Ireland, may have their due weight in the settlement of this important question.

We have the honor to remain, &c., &c.

ANIMAL MAGNETISM.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I have read with considerable interest the remarks upon Mr. Spencer Hall and Phrenomagnetism contained in your Journal of the 11th current, because the good folks of Kent have lately been entertained with similar exhibitions. Many respectable people are inclined to believe the humbug, because, at the moment of exhibition, no one takes the trouble of denouncing the lecturers as impostors. But really the scene is quite disgusting when such barefaced tricks are practised for the sake of raising a little money.

I lately attended a lecture upon animal magnetism given by *two gentlemen*, one of whom had been apprentice to a carpenter, and the other had formerly gained, as I am informed, an honest livelihood as a marker in a billiard-room. In the present instance ignorance and impudence went hand in hand to the amusement of most of the audience, who now talk of the evening with some little shame, as if they had been witnessing the jugglery of some miserable country fair. Two young women and two boys were the patients, but they had not got their lesson perfectly; one boy cried when pricked with a blunt pin, and one of the girls when on her knees, like the Yorkshire tailor, began repeating the Lord's prayer; but I put an apple to her mouth so as to interrupt her profanity, and she laughed outright, and covered her face with her hand so as to conceal her grins.

The parties left the village immediately after their paltry performances were over, having gained a sovereign or two for themselves, but no credit for their science.

I confess I did not expect to be converted to a belief in Mesmerism when I paid my shilling; but as I was not previously aware of the private history of the lecturers, and as similar scenes have been patronised by such a man as Dr. Elliotson, and by the highly honorable commandant and other officers of the Chatham garrison, I thought I was more likely to ascertain the truth by personal investigation than by reading newspaper accounts of amputations without pain, and other statements of the like kind.

I am, Gentlemen,

Your obedient Servant,

H. IMLACH.

Sittingbourne, Feb. 16, 1843.

RETROSPECT OF THE MEDICAL SCIENCES.

AQUO-CAPSULITIS.

Inflammation of the aqueous membrane appears to be essentially marked by the appearance of a general or partial, more or less intense, opalescence, and which, as might be expected, may have its origin in the corneal, iridal, or capsular portions; when in the former, the greatest facility for diagnosis is afforded. When the corneal portion is affected, it may be throughout or in circumscribed patches, and most frequently in the inferior half; and here the surgeon must be careful not to confound it with corneitis or corneal conjunctivitis. The points of diagnosis are these: an opalescence being observable, the cornea must be examined in different directions; a smoothness of its surface and clear reflection of light will at once exclude the conjunctival covering from any participation; a second inspection, also, in different lights, will show that the opacity is deeply seated, and posterior to the corneal lamellæ; and if the disease be in its advanced stage, certain peculiar white spots will appear, and may be considered as pathognomonic; although in corneitis, more especially when chronic, the appearance is somewhat similar, consisting of a number of isolated opaque points, but which are less symmetrical, and more irregular in shape and disposition, than when a similar condition of the aqueous membrane is present, and the greater superficiality of which an experienced eye will soon detect. In noting, however, this deep-seated cloudiness, it must not be forgotten that an opaque condition of the aqueous humor is incidental to advanced age; and that rare cases have been recorded by Clemens and Rosas of the same appearance having been produced by a sudden suppression of the mammary secretion.

If the iridal portion alone be affected, it becomes much more difficult to detect the independent existence of the disease, as its situation renders it much more liable to be confounded with iritis. Dr. Wedemeyer, in a paper on aquo-capsulitis, gives six cases of the unmixt disease, in four of which a change more or less in the color of the iris had occurred. This, then, as a point of diagnosis is not at present entitled to weight. Mr. Bedford is inclined to believe that in simple aquo-capsulitis the iris is much more mobile than when its proper structure is affected; until the period, at least, when inflammation has proceeded so far as, by effusing lymph, to glue it to the neighbouring parts, and thus effect the same result. In this state of things the natural brilliancy of the iris is impaired, and the regularity and distinctness of the fibres are occasionally lost; but Mr. Bedford says he is not satisfied whether the latter appearance pertains to the parenchymatous or membranous disease, or both.

The disease may extend to the portion of membrane covering the posterior aspect of the iris, and also to that lying over the capsule; in the former case it is designated uveitis. The vascularity of the external tunics is less than in any other of the ophthalmia: slight conjunctivitis with an imperfectly defined sclerotic zone, an increase in the vascularity of which may be in some degree considered the measure of the inflammatory extension; dimness of vision, dependant upon the degree of opalescence; occasional photo-

phobia; pain with or without pressure, more especially when distension takes place, are the principal attendants. Its frequency appears greater below than above the adult age; its causes are to be found in the list of those producing the other ophthalmia. The treatment is similar to that for iritis, but equally strong measures are not generally required.

Its results appear to be—1st, increased secretion; 2nd, effusion of lymph; 3rd, puriform effusion; and 4th, ulceration.

The first and most insidiously produced result, but at the same time the least frequent termination, is increased secretion, constituting dropsy of the anterior and sometimes of the posterior chamber. The chief additional symptoms are a considerable increase of the distance between the cornea and iris, the latter assuming a concave appearance, the former appearing less convex, seeming, indeed, in its outline to form a segment of the ocular rather than one of a smaller circle. Chelius and some others imagine that conical cornea is likewise owing to increased secretion. The effusion having taken place, a tensile and circum-orbital pain is produced. If vision be not impeded by much opacity, presbyopia is said by some writers to be produced; by others, myopia. The general opinion is in favor of this disease being very intractable, and in many cases not to be subdued without surgical assistance. Mr. Lawrence gives a decidedly unfavorable prognosis, stating it to be most frequently the companion of the strumous diathesis.

The more simple and yet more salutary treatment is perhaps the local abstraction of blood by cupping, to the amount of a few ounces; the administration of calomel combined with rhubarb, antimony, or opium, according to the indications; blisters are also useful; colchicum has been strongly advised. Wardrop placed much value upon the evacuation of the aqueous humor; but this, although a palliative measure, has its disadvantages, and seems only absolutely necessary under two circumstances—1st, where the distension of the cornea is so extreme as to threaten its health; 2nd, where agonising pain exists. But this evacuation, to be effectual, must be repeated daily, and even then is often useless. If the affection be of a strumous character, the treatment must be regulated by general principles, and, instead of the before-advised, alterative mercurials and tonics must be ordered.

The second form is that in which lymph is effused in larger or smaller quantities, comprehending all cases of morbid adhesion of the iris, either to the cornea or lenticular capsule; this Mr. Bedford believes to be the form connected with the spotted or mottled appearance of the membrane; these spots appear actually to depend upon the presence of minute portions of lymph, either on its free or attached surface. They are distinctly visible, very circular, and uniformly diffused. Several authors, indeed, believe that these appearances owe their existence to an extension of inflammation to the proper substance of the cornea; but opposed to this is the fact that they have been observed by Mr. Tyrrell on the iris, and in a case related by Mr. Mackenzie appeared and disappeared in the course of a few hours—a circumstance

difficult to account for if their locality were in the cornea, a structure in which absorption is not rapid. In the least severe form the effusion exists in mere shreds or as a fine false membrane.

The treatment to be pursued in this form of the disease consists of calomel, a grain or a grain and a half two or three times a-day, combined with a quarter or half a grain of opium, preceded by the moderate abstraction of blood from the temple, the degree of vigor in the treatment of course depending on the activity of the disease; the addition of ipecacuanha, so given as to produce a degree of nausea, will be found exceedingly useful; thus not only placing the system in a condition to facilitate remedial action, but keeping down the appetite, and thus most materially assisting our endeavours to enforce the antiphlogistic regimen. In more chronic cases the iodide of potassium will be found an useful ally.

The third termination appears to consist in the simple production of pus, or pus mixed with lymph, or of a puriform fluid. Although not prepared to assert that pus is actually secreted by the aqueous membrane, Mr. Bedford says he has seen one or two cases where, during the existence of hypopion, something very like a stream of pus was traceable from puriform points extending down to the hypopion. In this form the general opalescence is not perceived, but simply a small number of isolated spots, more puriform in appearance, irregular in form, and less numerous, than those developed in the second form, and which have been described as producing a mottled appearance. The color of the effusion, which is frequently of a bright yellow; its consistence, which is permanently fluid; its continuing for some time freely movable with every motion of the head; its lying, moreover, in contact both with the corneal and iridal membrane without any adhesion taking place, which would probably be the consequence of adhesive matter being so situated, are strong proofs of the purulent character. Mr. Bedford is satisfied he has observed these conditions, where the existence of the pus could neither be attributed to the suppuration of a lymph tubercle effused from the parenchyma of the iris, nor to the irruption into the anterior chamber of the contents of a corneal abscess; such effusion, therefore, being necessarily the unassisted product of the membrane.

With respect to the propriety of puncturing the cornea to remove the effusion, Mr. Bedford observes that small effusions may, by judicious treatment, be dissipated, and that altogether the weight of evidence is adverse to the proceeding. Mr. Lawrence has observed, in reference to this question, that to evacuate the matter, so long as the cause producing it is in action is worse than useless, as not only will the secretion return, but in addition an injury will be done to a part already in a diseased condition. Beer, who, in the early part of his career, universally recommended the application of the lancet, became subsequently just as strongly opposed to its employment. Walther states that if on puncturing the cornea it be found soft and non-resistant the worst consequences may be expected.

The fourth result, that of ulceration, is dismissed by Mr. Bedford briefly as follows:—It is well described by Mr. Tyrrell; he says it commences in a

small opaque spot similar to those already described, and that pus is its product.

He concludes thus—1st, *Aquo-capsulitis* may be simple or strumous, acute or chronic; 2ndly, slight opalescence or cloudiness of the membrane is the essential mark of inflammation, and this is dependant upon no morbid deposition, but simply vascular turgescence, constituting inflammation, in a transparent structure; 3rdly, the peculiar spotted appearance of the membrane, depending, probably, on deposition of lymph, or insulated points of purulent effusion, together with turbidity of the aqueous humor, is indicative of a more intense degree of inflammation; 4thly, *aquo-capsulitis* may terminate in increased secretion, fibrinous and puriform effusion, and ulceration; 5thly, increased secretion, constituting dropsy of the anterior chamber, is distinguishable by certain well marked objective and subjective symptoms; such a condition is not necessarily fatal to vision, and may, by certain modes of treatment, be relieved. Evacuation of the aqueous humor, although a palliative measure, and deserving to be made use of when great suffering exists, is yet accompanied with many disadvantages, and, as far as a radical cure is concerned, is of very doubtful value; 6thly, fibrinous is, in the first stage, amenable to simple remedies, and, when more advanced, yields to moderate mercurial action; 7thly, puriform effusion probably exists as an occasional result of simple inflammation, but less frequently so than fibrinous; that when it exists to a great extent, evacuation may be resorted to with advantage, but that, in a great majority of cases, its removal is effected by absorption, and chiefly through the agency of those curative means which may be proper for the particular ophthalmia in which it occurs; 8thly and lastly, that of all results ulceration is the least frequent.—*Guy's Hospital Reports.*

LITHOTOMY.

Mr. Fergusson, of King's College, in the course of some clinical remarks on a case of lithotomy, drew the attention of the pupils to the length of the external incision. It was fully six inches long, the quantity of fat on the hips and perineum showing that the wound must be very deep ere the bladder could be reached, while the supposed magnitude of the stone (it weighed four ounces, and its circumference was eight inches and a quarter by five and three-quarters) indicated the necessity for a free external opening. There is an utility in such an incision which appears to have been overlooked; it is, that after the skin has been divided, although the point of the knife may have been thrust half an inch deep, when the edges of the wound separate, the fat and cellular tissue seem to be on the same level as the skin; in other words, the perineum is made nearly half an inch shallower; on the other hand, if the external incision be a short one, instead of the edges separating, and permitting a ready access to the deeper parts, they will form a tight band over the forefinger of the left hand, when it is thrust towards the neck of the bladder. It is only the external wound which Mr. Fergusson makes so large; the internal one is very limited indeed. He considers that the textures about the neck of the bladder are more readily extended than the skin, and therefore that the deep parts of the wound can with facility be

dilated to the extent requisite for the extraction of the stone. The internal opening should be made partly with the knife, finger, and forceps, for, when the blades of the latter instrument are opened, they have a considerable influence in this respect. An internal incision, large enough to allow the passage of a stone an inch and a half in diameter, without dilatation, Mr. Fergusson says would be highly dangerous.—*Lancet*, Feb. 18, 1843.

TUMORS IN THE COURSE OF THE MEDIAN NERVE.

A young man, about twenty-three years of age, of a good constitution; was admitted into the hospital under the care of M. Brun, presenting two tumors in the right forearm, which had existed about ten years, during which time they had increased in size very slowly, and only gave rise to pain when they were compressed, or during the changes of the weather. On his admission, the upper and larger tumor, situated about midway between the wrist and elbow, was about two to two inches and a half long, by nearly two inches wide. It was evidently deeply-seated among the muscles. The second tumor, which was smaller and more superficial, had a diameter of about two inches and a half. The skin was not discolored over either tumor, nor was it at all adherent; the superficial veins were not enlarged, nor was there any pain experienced, except when the tumors were compressed, and it was then felt more in the hand and arm than in the forearm. It had never been of lancing character. Whenever the pressure was continuous, as in the act of writing, the forearm resting on a resisting surface, or in any motion bringing the flexors of the hand and fingers into action, the patient felt a degree of painful formication in the fingers, and a diminution of the sense of touch. By a careful examination, a kind of tense chord could be discovered passing from the lower tumor towards the hand, which was supposed to be the tendon of the palmaris longus.

The patient was exceedingly anxious to be rid of the tumors, and at a consultation it was decided that they should be extirpated, which was accordingly effected. Both tumors were readily discovered by some dissection, and after some fresh incisions had been made, two others were discovered lying so close together as to appear as one. The three were connected together by a whitish resisting chord, the nature of which was not at first recognised, but which, from its direction, anatomical relations, and structure, was soon afterwards ascertained to be the median nerve. It was divided above and below the tumors, its section being accompanied by the occurrence of a pain, compared by the patient to a violent shock, in the hand and arm. Loss of sensation in the first four fingers immediately followed, that of the fifth remaining intact, and also sensation on the back of the hand. The patient could slightly flex and extend the fingers afterwards.

The patient survived the operation about a fortnight, dying from the consequences of purulent absorption. The examination of the body was not made.

On examining the diseased growths, they presented, in volume, shape, and appearance, some resemblance to a middle-sized onion, deprived of its outer coat. They were contained within a sac, and developed in

the interior of the nerve, the fibres of which were put on the stretch by them, but were not otherwise engaged in the disease. The contents of the sac presented all the characters of scirrhus; it was of a greyish-white color, resisting, elastic, and very slightly vascular. In their centre there were softened points of encephaloid matter; with some traces of vascularity. Above, below, and between the diseased growths, the median nerve was perfectly healthy.

M. Brun raises the question, which he says has not hitherto been noticed by surgeons, as to the absolute necessity of dividing the nerve above and below the tumors. With superficial neuromas affecting only an extreme branch of a nerve, such a proceeding is not of much consequence; but when the disease is deep-seated, and a large nerve affected, such as the radial, ulnar, median, or sciatic, it becomes a question of importance if it be not possible to dissect out the disease, and preserve the continuity of the nerve, the section of which may entail a persistent paralysis of sensation or motion. He believes that in many cases the nervous filaments do not participate in the degenerescence, and that, by careful dissection, the morbid growth may be isolated and removed. He is convinced, from the dissection made after the operation, that such a proceeding might have been adopted in the case just detailed.—*Journal de Médecine de Lyon*.

CONTRACTION OF THE AORTA.

Mr. Muriel, of Wickham Market, Suffolk, has published a case of contraction of the aorta occurring in the person of a young man, who, about nine years previous to his decease, had suffered from symptoms resembling those of aneurism of one of the larger vessels of the chest, but which had gradually subsided under treatment. In the month of June last, while lifting a heavy weight, he sprained himself, the accident being followed by severe pain in the back, general muscular spasms, &c. He lingered till near the end of July, when he died comatose.

On examination of the body, forty-eight hours after death, there was considerable deformity of the chest from projection of the sternum, particularly towards the ensiform cartilage; also an inclination of the spine (in the upper dorsal region) towards the right side. The pericardium contained about three ounces of fluid; heart rather large, with some dilatation of the ascending aorta, and of the vessels arising from the arch; constriction, almost amounting to obliteration, of the aorta, near the junction of the ductus arteriosus; great dilatation of the superior intercostal arteries, particularly those on the left side. No remarkable valvular disease of the heart. Opposite the constriction, and closely connected with the aorta and trachea, was a dense tumor, about the size of a small hen's egg, consisting of enlarged glands. The left sides of the bodies of the third, fourth, and fifth dorsal vertebrae were partially absorbed, opposite the tumor. The lungs and other viscera were healthy. The head and spine were not examined.

An engraving is also published by Mr. Muriel, representing an anterior view of the upper portion of the aorta, together with the pulmonary artery and the obliterated canalis arteriosus. The three arterial trunks arising from the aorta are dilated and thinned. The large branch arising from the aorta

just below the contraction, the common trunk of the first intercostal, is enormously dilated, and, no doubt, by its anastomosis with the intercostal branch of the subclavian, formed one of the principal sources through which the descending aorta received its supply of blood. The intercostal arteries lower down were also considerably enlarged. The contracted portion of the aorta admitted the passage of a probe, and may possibly have allowed the transmission of a small quantity of blood.—*Guy's Hospital Reports*.

MEDICO-CHIRURGICAL SOCIETY.

The annual meeting of the Royal Medical and Chirurgical Society took place on Wednesday, the 1st of March. There was a larger attendance than usual of the senior fellows, in consequence of a report having gone abroad that certain innovations would be attempted to be made in the bye-laws by the junior members. The council of this institution is a *fac simile* of those of the Colleges of Physicians and Surgeons; *i. e.*, it is a self-elected body, and totally independent of the intelligent class of men it is intended to represent. The council, at a secret meeting, select the names of a certain number of fellows whom they wish should replace them in office the ensuing year. They print these names, *pro forma* as it were, circulate them amongst the fellows of the society, and then summon a general meeting. Now, it is generally understood, that there is no opposition to be made to the nomination of the council, for those gentlemen, whose names are printed in the prospectus, are considered virtually elected before they are ever submitted to the consideration of the society at large; hence, the expedient of calling a meeting at all can only be viewed as a kind of placebo to mollify the ire of those disappointed malcontents, who are to be found in every assembly, and who are always ready to disturb the harmony of the members, on the plea of doing a public good, when a plausible opportunity occurs. This is all very well as a stroke of policy, and, no doubt, has been found to answer its purpose; but surely a learned and enlightened society, like the Royal Medical and Chirurgical, is deserving of more ingenuous treatment. If the council think it expedient that they should be self-elected and irresponsible, after the fashion of their great prototypes, why let them be so, but at the same time let it be *openly avowed*; but in the name of truth and honesty, let not the hood-winking system be perpetuated in the administration of this rising and honorable institution. Mr. Macilwain made a spirited opposition at the general meeting, on the 1st inst., against some of the nominees of the council, and was very near carrying his point. Few men would have had the moral courage to undertake so invidious a task; but once the ice was broken he found many ready and willing to second him.

The president, Dr. B. Williams, delivered a long valedictory address, in which he introduced a memoir of the life of Baron Larrey. He also announced the

resignation of Dr. John Elliotson and Mr. E. Symes. Mr. Stanley was elected president for the ensuing year.

LITERARY INTELLIGENCE.

Dr. Elliotson and Mr. Symes, commonly called the doctor's "shadow," have retired from the Royal Medical and Chirurgical Society. We understand that Dr. Elliotson will publish in a few days a pamphlet, entitled "*Mesmerism versus Hippocratism*," in which he drubs the profession soundly as a set of bigotted and thick-headed blockheads. We understand the learned doctor declares he has sounded the pericranium of all the most eminent members of the Hippocratic school, and found them, without one exception, wonderfully "dull on percussion." The motto of Dr. Elliotson's pamphlet is—

"Lay on, Macduff!"

And d—d be him who first cries hold, enough!"

BOOKS RECEIVED.

Popular Cyclopædia of Natural Science; Mechanical Philosophy, and its Application to the Arts. By W. B. Carpenter, M.D. London: Orr and Co., 1843. 8vo. pp. 313.—[Although not strictly professional, we cannot avoid recommending this work to the notice of parents and instructors of youth. We have had ourselves some experience in teaching, and we can safely affirm that nowhere have the elements of mechanical philosophy been more happily or usefully illustrated than in this unpretending but clever treatise.]

THE PORTFOLIO.

Our publisher requests us to state that he has prepared a portfolio, for the purpose of containing the numbers of the Provincial Journal during the publication of the volume. The specimen sent to us by Mr. Renshaw is a handsome cover, which answers the object for which it is designed very completely.

PROMOTIONS AND APPOINTMENTS.

War-office, February 24, 1843.

45th Foot—Staff-surgeon of second class, Duncan Menzies, to be surgeon, vice Ferguson, who retires on half-pay.

1st West India Regiment—Francis Michael Mac-hardy, gent., to be assistant-surgeon, vice Murphy, appointed to the 32nd Foot.

Hospital Staff—Assistant staff-surgeon, A. T. Jackson, to be staff-surgeon of second class, vice Menzies; G. W. S. Brown, gent., to be assistant-surgeon to the Forces, vice Jackson.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, February 24, 1843.

A. P. Hamilton, C. P. Ring, W. Cantrell, J. S. Kirkman, T. H. Cooper, J. Currie, G. B. Irving, J. C. Robinson, J. I. Hely, E. C. Johnson, J. N. Morse, H. W. Price.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET,
CAVENDISH SQUARE, LONDON.

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PRACTICAL OBSERVATIONS ON DISEASES OF THE SKIN.

By THOMAS H. BURGESS, M.D., &c.

No. VI.

SYPHILITIC ERUPTIONS OF THE FACE.

(Concluded from page 425.)

Papular Syphilitic Eruption.

The syphilitic papular eruption frequently passes into the tubercular form, the most common and important variety of all the syphilides; hence, I shall describe these eruptions consecutively and in the order of transition.

The papular venereal eruption commences by an evolution of small-sized circular spots, of a coppery, red color, upon which small conical papulæ are presently evolved, in the form of groups, similar to those of lichen, but larger, rounder, and more disseminated. These papulæ are of a deep greyish-brown color, or violet brown, perfectly distinct from the well-marked coppery color of the patches on which they were developed. They frequently terminate by resolution, but sometimes suppurate at their apices. A slight elevation of the epidermis is caused by the effusion of a sero-purulent fluid, terminating in the formation of a dry incrustation, which falls off, and is replaced by a kind of scale. Indeed, in some cases where the papulæ are broad and flat, the copper-colored patches seem to degenerate into a true scaly eruption; but, as I have already observed, the transition is more commonly into the tubercular species. In general, however, the papulæ preserve their conical or slightly flattened form for a period of variable duration, and then terminate by slight desquamation; or else they shrivel and fade off, leaving behind a brownish violet tint, with or without depression in the skin, which disappears soon after. According to the views of M. Baumés, this eruption, which is often developed before the primary syphilitic symptoms have subsided, is severe and rebellious in proportion as the period of its evolution is distant from the disappearance of the primary disease. It most commonly appears on the upper regions of the body—as the forehead, neck, back, and shoulders. Although it often occurs on the forehead, the face itself is seldom attacked. When the papulæ are small and numerous, and developed on the arm, the eruption has been erroneously supposed to be a syphilitic form of itch—hence the name of *scabies venerea*. There is no venereal itch; but small vesicles and pustules are so frequently mingled with the papular eruption that the practitioner should be always on his guard not to confound them, or mistake one disease for the other. The syphilitic papular eruption is most commonly met with in adults, and, unlike certain forms of the pustular and tubercular syphilides, is

seldom observed in the new-born infant. Syphilitic lichen occurs more frequently on the face than any other form of the papular eruption, and the innumerable small papulæ characteristic of it often present a shining appearance, which, together with the copper color, gives the disease a very remarkable appearance.

Tubercular Syphilitic Eruption.

This is assuredly the most frequent of all the venereal eruptions. Although it may appear on any part of the body, it attacks the face, the nose, the ears, the eyebrows, and the scalp, much more frequently than any other of the class of eruptions under consideration. The elementary lesions of this and the preceding species are, in point of fact, closely allied. The tubercle is, in most instances, nothing more than the morbid development or hypertrophy of the elements of a papule, and the form and size of this tubercle are determined by the degree of intensity of the accompanying pathological phenomena. The tubercular syphilitic eruption is characterised by an eruption of small, solid, resisting tumors, containing neither pus nor serum. These incipient tubercles are prominent, or slightly elevated above the level of the skin. They are sometimes extensively diffused, whilst at others they are few and limited to a small extent of surface—in some cases disposed in groups or clusters, in others they are disseminated over a great portion of the cutaneous envelope. Their size and form are as variable as their disposition. Thus, for example, they are sometimes as small as a pea, round, shining, and of a reddish, coppery color; whereas in other instances they will be found broad, round, or oval, and imbedded, as it were, in the substance of the cutaneous tissue, or else distinctly prominent, and resting apparently on the external surface of the skin. Again, we may find them smooth and polished in one case—in others crowned either with a thin scale, or with a thick, rugged incrustation.

In one patient they will leave no other traces of their existence behind than that of a greyish coloration, which eventually fades off. In another we may find, after the decline of the eruption, an irregular indelible cicatrix, and very often destruction of the parts in which the tubercles were evolved. The progress of the disease is also irregular; in one instance it will be slow and gradual, in another hurried and rapid. It is often preceded by inflammation of the mucous membrane of the pharynx, of the soft palate, and amygdalæ, by cephalalgia, nocturnal pain, especially in the limbs, and by general febrile disturbance. M. Bielt described five varieties of the tubercular syphilitic eruption, each depending on some peculiar deviation in the appearance of the general symptoms; and this arrangement has been followed by all subsequent writers on dermatology.* Want of space pre-

* See Cazenave's Manual of Diseases of the Skin, art. Syphilides.

cludes me from describing these varieties individually. M. Gibert has observed, that nurses who have suckled diseased children are more frequently attacked by the tubercular eruption than any other form of the syphilides. Small tubercular elevations are evolved round the nipple, and are subsequently converted into scabby ulcerations; fresh tubercles are then developed about the anus and vulva, and the disease may finally be diffused over the whole body. The same writer records a frightful case of the ravages of this dire disease:—A man, aged forty-five, of a sanguineo-lymphatic constitution, had had the primary syphilitic disease several times, and which was always carelessly treated. At the last attack, shortly after taking a warm bath, his body became suddenly covered with an eruption of incipient tubercles. These gradually increased in size, and at the period of his admission into the Hospital of St. Louis, his back was covered with large sized tubercles, mingled with scabby pustules of a horrible appearance; deep and extensive ulcerations ensued, became diffused, and were covered with greenish-looking scabs. The face, the mouth, the tongue, were also attacked by ulcerated tubercles, producing loss of substance in several places; and greyish ulcerations, with sharp cut edges, appeared in the throat and fauces. The patient's face was frightfully disfigured, and extremely repulsive. After ten months' treatment with the arseniate of soda in solution the disease was arrested, and a final cure was established, but the traces of the ravages of the disease were never removed.

Squamous Syphilitic Eruption.

This is a remarkable form of the venereal syphilitic eruptions, for, as M. Cazenave has well observed, in this variety we find not only the ordinary products of inflammation, as serum, pus, scabs, ulcerations, and cicatrices, but a double lesion of the cuticular structure, of the apparatus destined for the secretion of the coloring as well as of the epidermic matter.

The syphilitic squamous eruption is characterised by the formation and appearance of dry, slightly adherent, greyish epidermic lamellæ, reposing on patches of the skin, which are slightly raised, and of a coppery and sometimes of a blackish color. This characteristic color is always to be found; for no matter how small the patches may be, they are never completely covered by the epidermic scale. The lamellæ, which are in general thin, are the result of thickening of the epidermic secretion, which dries, cracks, and is detached in the form of scales. The process of development is, however, sometimes different from that now mentioned, and instead of the formation of thin scales, extensively diffused, the disease may be confined within a narrow compass, and the epidermic matter thickens and assumes the appearance of a horny product deeply imbedded in the skin. The progress of this eruption is always tedious and slow, it terminates by resolution, and never by ulceration or cicatrices, but a blackish hue remains for a long time on the skin after the disappearance of the disease. The syphilitic squamous eruption may assume any of the forms of the simple scaly disease; but the characters it most commonly assumes are those of *lepra vulgaris*, psoriasis, and a horny variety of the latter, somewhat similar to psoriasis palmaria. That variety which appears in the form of circular

discs is the only one to which the name of syphilitic *lepra* can properly be applied. It should not be confounded with the *lepra venerea* of Alibert and other writers, which is a pustulo-crustaceous eruption (*impetigo syphilitica confluens*) and a good example of the erroneous manner in which the term *lepra* is often used to signify every cutaneous disease of an apparently severe character. This eruption, when it appears in the form of circular discs, is characterised by round patches, slightly raised at the edges and depressed in the centre. These patches never attain the large size of the common form of *lepra*; they are generally about the size of a shilling, frequently less. They commence by a small point raised above the surface, like a large papule, and of a strong copper color. According as they increase, the borders become raised and the centre depressed; by and by the whole patch partakes of the copper color, and is covered to the edge with greyish, dry, hard scales.

The eruption may remain stationary for a long time; the scales fall, and are renewed incessantly, until at length the vitality of the parts become altered and the disease subsides, leaving behind dark-colored patches corresponding to the scaly discs; these discolorations are of a brownish color at the circumference of the circle, and much paler in the centre, whence the deep color first disappears. It commonly attacks the limbs, but may become general, and it often occurs on the scalp, face, and forehead. M. Bielt described a small, white border surrounding the base of each disc which he considered to be pathognomonic of this eruption. This white line is evidently produced by laceration of the epidermis.

Diagnosis.—Although the characters of the syphilitic eruptions are clearly marked, they are, nevertheless, sometimes overlooked or mistaken for those of the corresponding *simple* cutaneous affections. Their symptoms, however, are very distinct, and the careful observer will seldom fail to detect a certain *ensemble* which it is difficult to describe, depending on the peculiar color and arrangement of the eruption and general state of the patient. To describe the diagnostic signs, individually, which distinguish the syphilides from diseases not of syphilitic origin, would be to recapitulate all the phenomena which characterise the eruptions under consideration, and would extend this article beyond the prescribed limits, therefore referring the reader to M. Cazenave's Manual of Diseases of the Skin, art. Syphilides, for further details on this interesting subject, I shall now proceed to consider the treatment of the syphilitic eruptions.

Treatment.—I shall not enumerate in this place the long list of remedies which have been employed in the treatment of constitutional syphilitic eruptions. I shall confine myself to a consideration of those which experience has proved to be the most useful. Although the utility of antiphlogistics and emollients has been much extolled by writers who considered these remedies sufficient in themselves to cure the majority of cases of syphilitic eruption, the experience of Bielt and Cazenave at the Hospital of St. Louis has not enabled them to corroborate that opinion. The latter writers consider them to be exceedingly useful as auxiliaries, but that if they happen to effect a cure in one or two instances they fail in the great majority of cases, except in the acute papular or exan-

thematous syphilides, which are in general temporary eruptions appearing and disappearing with the primary symptoms.

It should always be borne in mind that a certain amount of irritation of the chylipoietic viscera accompanies the syphilitic eruptions of the skin, and it is obvious that until this morbid condition be removed or else materially diminished, the tendency of the constitutional or functional disorder to manifest itself externally in the cutaneous tissue will be kept up, and every method of treatment will be unavailing. To prescribe therapeutic remedies before that event shall have taken place, with the view of curing the disease, is to err against the principles which a rational empiricism inculcates—to overlook the cause, in the anxiety to remove the symptoms. This observation is not confined to the syphilides. It applies to cutaneous pathology generally, for there are few diseases of the skin which can be called idiopathic in the strict acceptance of that term. The immense majority of them are merely the outward manifestations of organic or functional derangement; hence, the inefficacy of local measures unaided by constitutional treatment. Presuming, then, that this functional malaise is allayed, if not overcome, we shall proceed to point out those remedial agents from which the practitioner is likely to derive the most benefit.

First and most important of all is *mercury*. After a long experience M. Bielt came to the conclusion that the preparations of mercury were, beyond doubt, the most powerful remedies that we possess against syphilitic diseases of the skin; although sometimes unsuccessful, they answer our fullest expectations in a great majority of cases, and it seems probable that their occasional failure may depend on the manner in which they have been administered. For example, mercury should never be given in the acute stage of a syphilitic eruption. No precise rules can be laid down as to the quantity to be administered, for it is obvious that this must vary according to the age, constitution, nature of the symptoms, and other concomitant circumstances. The preparations of mercury commonly employed at the Hospital of St. Louis are Van Swieten's solution, or pills composed of corrosive sublimate and opium, and when there is a tendency to excitement in the digestive organs, the soluble mercury of Hahnemann in the dose of a grain daily will be found very servicable. M. Cazenave has found the greatest advantage from using Larrey's syrup in the dose of an ounce taken every morning on an empty stomach. The rules for making these preparations are fully described in Bielt's formulary appended to M. Cazenave's Manual. Of all the mercurial preparations, however, Bielt derived the greatest benefit from the proto-iodide of mercury. The administration of this remedy under his hands was attended by the happiest results even in the most obstinate cases. It may be employed in the form of pills, in solution, and as an ointment. Subsequent writers on diseases of the skin have borne testimony to the efficacy of this medicine, especially Gibert, Baumés, and Devergie. Bielt never found any injurious effects arise from the use of mercury in those affections. It should, nevertheless, be administered carefully, and in the event of symptoms of gastric irritation supervening, the medicine should be sus-

pended at once until these shall have subsided. Bielt and Cazenave protest against the old erroneous notion of the necessity of continuing the treatment for a month, or even longer, after the disappearance of the eruption with the view of preventing a relapse. If this plan be pursued it may seriously injure the constitution, and after all it does not give immunity from a return of the disease at a subsequent period.

The ioduret of potassium has, within the last few years, been much recommended in the treatment of the syphilitic eruptions. It had a fair trial at the Hospital of St. Louis, and the result of M. Cazenave's experience enables him to state that its beneficial effects are about equal to those of the proto-iodide of mercury. The former remedy sometimes occasions painful irritation in the throat, and at the epigastrium. The iodide of iron has also been strongly recommended in the treatment of the venereal eruptions, especially in those cases where the bones are affected. It is an excellent medicine, and will be found very efficacious. The preparations, however, that are in common use, as the solution and the solid preparation, cannot be depended on, from their great liability to decomposition. Mr. Scholefield, assistant to Mr. Bell, of Oxford-street, has succeeded in preparing a *syrup* of the proto-iodide of iron, which is not liable to decompose so readily as those now mentioned. I have seen this preparation in excellent condition after the lapse of several months, without being preserved from the light. I think it right to dwell upon this point, especially as the preparations ordered by the pharmacopœia cannot always be depended on. The mode of preparing the syrup will be found in a former number of this Journal.

At the Hospital of St. Louis a preparation, composed of sulphuret of antimony, sarsaparilla, and isinglass, called the "tisan of Feltz," has been found to succeed occasionally in cases where mercury failed. The patient may take two or three glasses a-day.

Muriate of Gold.—This preparation, although highly extolled by some writers, is by no means so efficacious as its advocates would have us believe; it was seldom seen to succeed in the practice of Bielt and Cazenave. The dose in which it is usually administered is the tenth of a grain applied in friction on the tongue twice a-day.

Subcarbonate of Ammonia.—This remedy has sometimes affected a speedy cure, and especially in cases where mercurial preparations fail. Bielt usually commenced with a scruple in some mucilaginous fluid, and gradually increased the dose to two or three drachms during the day.

Sudorifics.—This class of remedies is very serviceable in the treatment of syphilitic eruptions, especially when combined with other remedial agents of a more active character. The sudorifics most commonly employed are the decoctions of guaiacum, sarsaparilla, and mezereon. One of these decoctions may be taken in combination with Larrey's syrup every morning.

Acids.—The nitric and sulphuric acids have been recommended by M. Bielt in certain forms of the syphilitic eruptions. M. Cazenave says he has often seen simple cases cured by these remedies. The latter writer also observes that even inveterate cases, especially some forms of the pustular species, will

sometimes yield to the acids after having resisted much more active measures. The ointments used for the resolution of syphilitic tubercles are those of the proto-nitrate, proto-ioduret, or deuto-ioduret of mercury. Gentle inunction should be made with the finger over the largest tubercles. Of all the ointments, however, that have been used at the Hospital of St. Louis, one composed of twenty or thirty grains of the ioduret of sulphur to an ounce of lard has been found to be the most efficacious. M. Bielt employed this remedy with good effect in cases where nearly the whole body was covered by scars and large tubercles. The ointments first mentioned will also be found servicable in modifying or arresting the progress of the venereal ulcer, and the severe pain by which it is generally accompanied may be alleviated by the application of small pieces of lint smeared with the *hydrocyanic cerate*.

The foregoing remedies will be materially assisted in their action by the judicious administration of baths and lotions; thus, for example, alkaline lotions are the most appropriate for cases of pustular syphilitic eruption. The vapor douche will assist considerably in producing resolution of the tubercular form, and should be directed to the parts affected for the space of ten or twelve minutes at a time. Vapor baths are found to be exceedingly servicable in the scaly form of the disease.

I have now sketched an outline of the history of the *Eruptions of the Face*; and, as I have repeatedly observed, these papers are intended merely as an outline, and not a complete history of the subjects of which they treat. For a more elaborate account of the various eruptions mentioned, I refer the reader to the systematic treatises on diseases of the skin, and especially to the work of M. Cazenave. M. Cazenave's essay on the syphilitic eruptions is by far the most complete, the most faithful, and at the same time the most simple account of this interesting class of diseases that has yet been written. Indeed, I know of no other original essay on the same subject that can be at all compared to it; and as a proof of its excellence I may mention that it has been translated into the language of every country in which medicine is cultivated as a science.

29, Margaret-street, Cavendish-square,

March 4, 1843.

REMARKS ON CHOLERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In my first letter to you on the subject of cholera, I stated it as my firm opinion that it was to be ascribed to the “sudden abstraction of nervous energy from the cerebro-spinal system of nerves.” My object, then, in the present communication will be to examine into the state of the nervous system, as the best mode of illustrating what I then intended to convey to your readers. Before proceeding further, I may be allowed now to say, that for the term “abstraction” I would substitute sedative impression. The object which induces me to offer this qualification will, I trust, appear in the sequel.

Having already gone over the more striking symp-

toms of the disease, I may now content myself with the consideration of those more immediately connected with the nervous system, although it is impossible to do this without reverting in some degree to both the respiratory and circulatory systems. This is more necessary from my having imputed a great deal to a deranged condition of the respiratory system of nerves.

The circumstances which now call for especial notice I consider to be the following:—

1. The sudden prostration of all the vital powers.
2. The state of the respiration, which in many of the severer cases has been hardly perceptible *ab initio*.
3. The corresponding diminution of the action of the circulatory organs.
4. The excruciating torture arising from the spasms, which affect both the voluntary and involuntary muscles.

In regard to the first, it may be observed that, even in medium cases, it is so sudden as to prohibit the idea of it being the effect of the discharges, which, in fact, it very frequently precedes. That it is caused by the defective oxygenation of the blood owing to imperfect respiration, is no less improbable; hence, we must look for some other explanation, and such I firmly believe is met with, when we remember the anatomy of the respiratory nerves, on which we know the integrity of action of both lungs and heart to depend.

I am perfectly aware that to this view many and apparently well-founded objections may be opposed, and also that such objections may rest upon the basis of actual experiment. It may be urged that respiration may be artificially sustained when the connection of the lungs with the nervous centre has been interrupted by the division of the pneumogastric nerve; and that the heart may be excited to contraction under similar circumstances. This, I conceive, does not in any measure invalidate my proposition, as a piece of muscle may be made to quiver by the same means; yet will any one be bold enough to assert that muscle is, as to its action, merely influenced by, and not dependent on, nervous influence. My belief is, that the nervous, respiratory, and circulatory systems are so intimately connected, and so reciprocally dependent one on the other, that not one of them can be materially deranged without manifest implication of the others, and of this pathological observation affords us daily evidence. It may not be irrelevant here to advert to the effect on the sensorium produced by disease of the heart, and of cerebral disease on the heart, of which most practical men must have had but too many examples. If, then, we consider the extraordinary and rapid prostration of the powers of the system in cholera, whether we regard the vital or natural functions, we can only account for it by the supposition that the ganglionic system is primarily impressed, in whatever mode such impression may be made upon it. On this a few remarks will be offered, in connection with the causation of the disease. Suffice it now to add, that I deem the existence of a deprivation or depression of the energy of the respiratory and other ganglionic nerves as more than adequate to explain the whole of the phenomena which are justly held as pathognomonic of cholera,

and that this appears corroborated by the simultaneous and strictly correspondent derangement of the three great systems on the integrity of which life depends. The dependence of the respiratory system on its due supply of nervous influence is most abundantly proved both by physiological experiment and by pathological observation, and so I believe, also, the circulatory system to be—but even granting that the heart is only influenced by, and not dependent on, nervous influence, the idea of cholera being mainly attributable to some impression made on the nerves of respiration is not in the slightest degree invalidated, but on the contrary acquires strength, as even those who may question the extent of the heart's dependence on the nervous system cannot possibly deny that, by such imperfect state of the respiration, the blood no longer undergoes its normal change in the lungs, and is consequently no longer fit for the support of the vital process, or, according to a very old opinion, ceases to stimulate the heart. In further confirmation of the above, I must reiterate what was stated in a former paper—viz., that the derangement of the function of the heart and lungs, being contemporaneous as to its occurrence in this anomalous disease, such state cannot be regarded as the mere necessary consequence of disorder of the one upon the other, but must be ascribed to some common cause operating upon both, and which cause may be looked upon as dependent on the very intimate nervous connection existing between the heart and lungs. Having said thus much on the subject, it seems unnecessary to dilate upon the state of the respiration and circulation; I shall now, therefore, make a few brief remarks on the spasms, which form so common and distressing a feature in cholera.

At first sight it may appear somewhat paradoxical to offer the explanation which I am about to do. A very little consideration, however, will serve to do away with such apparent inconsistency. That spasms are to be generally ascribed to some irritating cause operating on the nerves supplying the parts affected, must be admitted. A familiar and apt illustration is afforded us in the effect produced upon the nervous system, and more especially of children, by acrid matter in the intestinal canal, whether in the form of improper and indigestible food or in that of depraved secretions. In other cases, however, we meet with increased nervous action under very opposite circumstances, which, *prima facie*, should lead us to expect diminution, or even suspension of nervous influence instead of increased or irregular action. As examples of this, it may be well to cite the convulsions which so frequently occur after hæmorrhage, more especially uterine; the same where narcotic poisons have been taken, or noxious gases have been inhaled; and, finally, the high degree of nervous excitability which so frequently occurs in the last stage of many diseases, where life has been gradually reduced to its lowest ebb. It is only further necessary to reiterate a statement previously made—viz., that of whatever nature the morbid impression causing cholera may be, it has but little power over the brain itself, as is amply borne out by the normal state of the senses and the unimpaired condition of the intellect to the very last. It is true that, in many cases, a perfect state of apathy may be observed; but when the patient is

roused, we find in it no resemblance to coma; in fact, consciousness remains. In a few cases this may not have been so, but so far as my observations enable me to judge, such deviations from what has been alleged may be regarded as the effect of the sad abuse of opium and stimulants which so notoriously characterised the earlier treatment of the disease in this country, and into which fatal error I frankly declare that I myself fell.

In my first letter I stated my conviction that the cause of cholera was to be looked for in some atmospheric peculiarity, and that such alteration appeared to relate to its electrical condition rather than to its mere purity or the reverse; the same remark applies to its temperature and moisture. Cholera having occurred equally in healthy and unhealthy situations, in places abounding with and free from miasmata, in cold and in hot climates, and at every season of the year. It was also stated, that although it sometimes appeared subservient to, it had also defied the laws of infection and contagion, of epidemic and endemic influence. Can this statement be disproved as to its truth? For its confirmation it will be found sufficient to refer to the statistics of the disease in India, on the continent of Europe, in this country, and in America.

Let us now inquire what circumstances, if any, have appeared to favor the supposition of its origin in electrical causes? To enter upon a protracted examination of this part of the subject is quite incompatible with the limits necessarily observed in papers like the present. I must, therefore, confine myself to the simple statement of what may be regarded as confirmatory of such origin of the disease; and must refer such of your readers as may feel any curiosity on the subject to a pamphlet published at Jedburgh, in 1832, its author being Mr. James Mather, of South Shields, who was at the time a member of the board of health in that town. Mr. M. has very minutely detailed meteorological appearances which he observed in the direction of Sunderland when cholera prevailed there, in that of Newcastle previous to its outbreak in that town, and subsequently to the north-east of Newcastle, in which direction it committed very great ravages. The peculiarities of the clouds, which Mr. M. has carefully described, were, though less developed, noticed by me, in the vicinity of New Bridge, about the time of the cholera appearing there; and to my mentioning such fact to a professional friend, I owe the perusal of Mr. Mather's observations, not being previously aware that he had written on the subject, nor having heard of such appearances. The important influence of electricity over the character and course of clouds is so familiarly known as to render comment superfluous. Hence, if no question exist as to the accuracy of the observations made, it is legitimate to infer that electricity must have acted an important part in the production of such phenomena. The appearance which I noticed consisted in the presence of a peculiarly dark, murky cloud, circumscribed as to extent, and well defined, the rest of the sky being perfectly cloudless; the figure of the cloud was the segment of a circle, being convex on its upper surface, and presenting nearly a horizontal line on its lower part; one striking feature was, that it seemed to be quite stationary, although at the time

there was a tolerable breeze. The light thrown over the country can only be compared to that existing during a partial eclipse of the sun; this could not rationally be regarded as depending on the relative position of the sun, cloud, and earth, as the sun was nearly at its altitude whilst the cloud was nearly north-west. The electrical origin of cholera acquires further support from the well-known property of electricity, not only to temporarily localise itself, but also to pursue a particular and undeviating course in its changes from place to place. Here, again, if we compare the course of cholera, a striking analogy will be found. Let me now, in conclusion, pass to what I regard as pathological proofs of the justice of the view now advocated. They are the following:—

The sudden, and in some cases almost immediately, fatal impression made on the system, which had but a moment before been in a perfectly healthy and vigorous state.

The condition of the blood abstracted during life, more particularly as regards the slowness of its coagulation and its dark grumous appearance.

Finally, the semifluid state in which it is found on dissection after death—and, in many cases, the flaccid state of the muscular system, and peculiar discoloration of the skin.

If the above phenomena do not strictly accord with the effects produced by lightning in its mitigated and concentrated form, I confess myself at a loss where to look for analogies, or to find a justification for attaching any importance to them.

In my next, a few practical remarks will be offered on the treatment of the disease.

I have the honor to remain,

Your most obedient servant,

GEORGE FIFE, M.D.

Sunderland, Feb. 23. 1843.

OBSERVATIONS

ON THE

TOPICAL PATHOLOGY OF THE NEURALGIE.

By Dr. BLACK, Manchester.

[From a Paper read at the Manchester Medical Society, March 1, 1843.]

The pathology of those severe afflictions—the neuralgiæ—is, perhaps, the least understood of all the numerous diseases that are chiefly characterised by pain, and the inquiries that have been made into the matter have been more directed towards their constitutional and exciting causes than into the intimate or proximate lesions which constitute their essence and being. Without adverting to the literature on this important class of diseases, which is very amply found in the works of Hutchinson, Martinet, Swan, Elliotson, Teale, Halford, Piorry, Scudamore, and Valleix, with a few others of late date, I shall proceed to analyse the phenomena of the disease, and submit a solution of the intimate nature or topical causes on which neuralgia, especially of the intermittent species, more immediately depends.

The chief characteristic of the disease is pain, and that of a peculiar sharp, poignant, lacerating, or excruciating nature. The pain along the course of a nerve, or at its issue through some texture or other of the body, is also very often sudden in its invasion,

temporary in its duration, or intermittent, and receding or departing sometimes as quickly, but more frequently with a gradual decline. Its recession generally leaves the part previously affected somewhat numb, as if it were contused or bruised, and the integuments often suffused. If the complaint explodes itself on the face or head, the senses remain after an attack for a while blunted, and the powers of the encephalon more or less exhausted and enervated.

One great diagnostic feature of neuralgia is its intermittence, which is sometimes very regular, as much so as a normally constituted quotidian or tertian fever, leaving the body or part in the interval free from any pain or sensible derangement of health. At other times the occurrence of the pain is very irregular, or at most remittent, and when the affection is long established, the diagnostic pain is only marked by a periodical or indeterminate exacerbation. The intermittent pain may also be engrafted on a deranged constitution or a diffused state of chronic rheumatism or gout. The next observation that may be made regards the condition of the system under which this affection obtains; and again, the several parts, organs, and tissues, in which it elicits its ruling character. Preceding or accompanying this complaint we frequently witness several deranged states of the nutritive and chylipoetic organs and of the nervous system, such as mucoenteric complaints, biliary obstructions or vitiations, hæmorrhagies, lesions or weaknesses of the cephalic, spinal, or ganglionic nerves, from mental or moral excitement, distress, or exhaustion. We moreover find that the complaint has originated from sudden exposure to severe cold; or to one less intense, conjoined with damp or malaria; and especially if the exposure have been topical, while the rest of the body has been warm, perspiring, or inactive. The condition of the parts affected are, however, more particularly the object of our observations, and to these we shall confine ourselves in the course of this paper, leaving the above enumerated subjects as being sufficiently recognised to appreciate the few simple but more precise data and inferences to be produced.

The principal parts on the head and face, where these peculiar attacks of pain are manifested, are—the supraorbital foramina or notches, the suborbital, mental, stylo-mastoid foramina, and the suboccipital region, the focus of which latter pain is between the base of the cranium and the atlas vertebra. On the trunk these pains are more particularly observed to be along each side of the spine, constituting spinal neuralgia; and again, midway along the periphery of the ribs, and next anterior to their osseous termination, giving rise to what are called intercostal neuralgia. These pains also manifest themselves in some transversely parallel lines over the abdomen, also towards the rectum, uterus, testes, and penis, on or about the knee from the anterior crural nerve, and also along the course of the sciatic nerve, extending even to the peroneal and plantar nerves. I may also advert to the irregular location of what are called the painful nervous subcutaneous tubercle, situated, according to my observation, more frequently on the trunk or upper extremities than elsewhere.

Our next inquiry is, What is there peculiar in these several parts or foci, whence irradiate those pungent or lacerating pains and other lesions of sensation and

motion? Anatomy shows us that at these points the several nerves pass through narrow bony canals, or between bones lined with hard cartilaginous surfaces, or else through apertures in firm aponeurosis or fibrous tissue, from all which they emerge upon the skin or outward integuments. Where such anatomical structure does not obviously obtain in the course of the affected nerve, we find that the composition of the neurilemma of the nerve itself goes far to supply the absence of any unyielding channel or aperture, through which, in addition, other nerves affected with neuralgia usually pass. It must, however, be remarked, that those nerves which proceed through osseous or fibrous canals are those which are more liable to be affected with intermittent neuralgia, or *tic douloureux*, while those which are less characteristically so exhibit painful affections of a more remittent or permanent type.

Another coefficient element in structure is, that those nerves which are more particularly afflicted with intermittent neuralgia, through whatever species of canal or aperture they pass, are accompanied at least with one artery and a vein, which are invested with little or no cellular tissue, and fill up with the nerve the whole canal or aperture, which they conjointly traverse. We have, then, a nerve, an artery, and a vein, passing together through a hard, unyielding, or firmly resisting, aperture, capable of no dilatation nor contraction, at least, in the absence of sufficient time, for molecular accretion or absorption to operate. The normal or physiological condition of the nerve and tissue of vessels is a relative and mutual adaptation and consentaneousness among the functions of the whole, permitting the free play of nervous action and sensation, and an undisturbed egress and ingress of the circulating fluids. Suppose, however, what has often been discovered,* that an osseous spicula or growth should intrude on the calibre of any of these bony canals or foramina, pressure on the nerve will follow, and according to the extent and mode of pressure so will the nature and degree of the pain or paralysis be. As the nerve cannot thus escape or be extended to one side, it must, from immediate pressure, be subject to a lesion of its functions. This special cause of neuralgia, therefore, requires no further notice of its structural pathology.

In the case, however, where the canal or aperture is perfect, and only lined with its periosteal, fibrous, or cartilaginous membrane, we must look either for some periodical or some more or less permanent causes of pressure on the transmitted nerves, the seat of the *tic* or the neuralgia. These causes, according to the character of the affection, may be physiologically attributed to the temporarily or chronically dilated diameters of the blood-vessels that are enclosed in the same unyielding canals or apertures along with the nerves, and of these vessels the arteries are those principally effectual in producing this pressure. We shall, for instance, take the infraorbital foramen, which is about one-tenth of an inch in diameter, and allot one-third of the area to each tissue—namely, the nerve, artery, and vein—all in the healthy state, performing their separate functions freely, and undisturbed by the action of one another; but when the artery, which is an elastic tube, happens to be

impaired in its muscular tension, from topical cold or any enervating cause, and especially if there is an increased *vis a tergo*, its diameter becomes disproportionately increased; and since the canal which it traverses is unyielding and resistant, the nerve will suffer its share of the encroachment and pressure from the artery. The extent of this pressure will occasion a proportional amount of pain, according to the sensibility of the nerve or of the constitution at large; and this pressure, for the time, acts in a similar manner to what would be induced by the intrusion of a harder body. The vein will also be impeded in its current, and give rise to fulness of its distal branches, and to integumental suffusion. As the nerve here instanced is one of sensation, the pain is often very exquisite and poignant, without paralysis, while such morbid categories occurring in the transit of the facial or *portio dura* nerve through the stylomastoid foramen occasion paralysis, without much or even any pain in many instances, this nerve being one principally of motion and expression.

The resolution of an attack of this intermittent neuralgia commonly takes place by an effusion of secretion from the nares and the lachrymal organs; while the climax or extremity of the pain reacts upon the brain, exhausts the nervous energy, and thus diminishes the propulsive action of the heart, by which the affected and offending artery is allowed to regain its normal elasticity and diameter, when all the several parts resume their healthy and reciprocating functions. The renewal of this morbid catenation depends, as the return of an ague, on the periodical enervation of the muscular power of the part or system, from the accumulation of debilitating impressions, conjoined with the recurring excitement of the heart from diurnal stimuli or from ganglionic irritation.

We have often very illustrative examples of this painful access, climax, and decline in attacks of tooth-ache. The paroxysms of odontalgia are often excited by some debilitating cause, as cold or damp; and the pain becomes so gnawing, throbbing, and excruciating, with swelling and suffusion of the gums and jaws, that the dentist's aid is forthwith summoned for extraction. Before, however, the operation is performed, the fear of its infliction possesses the mind to such a depressing extent that the heart becomes weakened through the emotion, so that the pain is resolved and the extraction of the tooth is often delayed.

Now, in this special category, we have a curious or phlogosed lesion of the sensible tissue of the tooth, which is a stated cause of muscular enervation. We have also accompanying the nerve a nutrient artery, entering together with it at the apex of the fang to supply the tooth, all equiposed in their structure and functions in a state of health; but in these paroxysmal attacks the artery becomes debilitated and dilated, and yields to the normal impulse, and much more to any increased *vis a tergo* of the blood. The associated nerve is thus compressed and pinched; and though its denuded extremity may appear to be the seat of the pain, I believe the pressure on its transit, through the unyielding canal of the fang, gives that intermittent exquisiteness of suffering which is so often felt. If the acute pain depended solely on the morbid lesion of the extremity of the nerve in the crown, I do not see how the pain would become so

* Sir Henry Hallford's *Orations and Essays*, 1830; Dr. Abercrombie on *Diseases of the Brain*, 1834.

suddenly alleviated, as it often is in the circumstances above noticed. We are cognizant of no change that could take place in the nerve in such a short time, if it is not treated topically or otherwise by medicine; but the quantity and force of the vascular current admit of very sudden changes, arising from either physical or mental emotions, and we can easily appreciate them in all their extent, from syncope and fear up to the effects of joy and anger, as producing vascular activity.

The unbalanced physiological conditions which we have endeavoured to illustrate in the asthenic dilatation of the artery, and consequent pressure on the accompanying nerve in the bony canals above cited, will apply to all the other nerves and arteries similarly situated, and also to those points of transit between separate bones, as between the vertebræ.

In those cases where the affected nerves do not make their trajet through unyielding canals or apertures, as through the intercostal fasciæ at the points noted by Valleix, we infer the pressure on the nerve to arise from the vessels which surround and accompany them through these anatomical apertures; and in other cases, from their being enclosed in the same firm sheath or neurilema. These morbidly dilated vessels are often found in cases of sciatica—for instance, to consist of veins tortuous and enlarged from chronic dilatation. The pain is hence either persistent or far less intermittent than when the affected nerves traverse, together with the vessels, a bony canal. The vascular dilatation may become organic, and the disease be chronic from a deposit of lymph in the interstices of the nervous fibrils, or from a varicose state of the vessels themselves; all, however, contributing to the efficient cause of this peculiar pain—viz., pressure or counterpressure.

I shall now proceed to inquire how far the views which have been propounded are borne out by a just inference from the effects of our therapeutical measures in these disorders.

We have two classes of remedies which are generally administered in these affections, and found more or less alleviating, and, in many instances, productive of a cure. These are, irrespective of other preparatory or auxiliary means, narcotics and tonics. The beneficial action of narcotics, as in many other cases of pain, is derived from their direct agency on the *sensorium commune* or the nerve, by impairing or benumbing their sensibility to the injury inflicted by pressure, or by allaying the irritability of the heart or the muscular fibre in general, and thereby assuaging the abnormal impetus of the blood through the vessels that are previously weakened and implicated. But I would draw my chief corroboration of the views I have stated from the physiological effects of tonics—as bark, steel, arsenic, and mercury. If, not omitting the decided effect of ol. terebinth. in many cases of neuralgia, any of these are exhibited, in tonic doses, during the accession of intermittent neuralgia, they are found at the time rather to aggravate the pain than otherwise. This arises from their immediate action, by increasing the already over-excited sensibility, and unduly stimulating the heart, thereby urging a greater *vis a tergo* on the already atonically dilated blood-vessels of the part implicated, and adding, for the time, to the unbalanced condition of

things that exist, not to omit the resistance to absorption during this period of over-excited sensibility. When, however, these tonics are exhibited in the interval of a paroxysm, or of a severer access of pain, or while the system is less in a state of resistance, they not only serve to obtund the sensibility of the nerves of the *primæ viæ*, but, from being absorbed into the current of the circulation, they impart increased tonicity to the blood-globules, and greater contractility to the fibrinous coats of the vessels, so that the capillary circulation is made more active, and the diameters of the vessels are thereby diminished. Thus, pressure against or around the associated nerves is either moderated or provided against, in the event of any aberrations or disturbances in the system tending to reproduce neuralgic phenomena. The beneficial effect of the oil of turpentine very much comports with its remarkable property of increasing the capillary circulation, and contracting the coats of dilated blood-vessels.

That such is the principal curative action of these substances on the living animal fibre and blood-vessels, is what many observations have confirmed, and that the morbidly affected nerves are not directly influenced by their exhibition. If they were so, I do not see why their painful lesions of sensation or paralysis are not relieved by them during the paroxysms, as they are frequently by the exhibition or application of narcotics. Besides, we know that the gallic acid and tannin in the cinchona, and other astringent barks, have a great tendency to consolidate gelatinous matters, and that arsenic and mercury have also a determinate affinity for albumen, forming with it a firmer compound. Now, there is no doubt but that a diminished action from these substances, within the confines of healthy physiological life, will tend to consolidate and to give firmness, or what is called tone, to the gelatinous and albuminous matters in the tissues of the body.

Local bleedings, as by leeches, often alleviate the exacerbations of pain, but they seldom afford any permanent relief; for, as they only serve to take off the local pressure for the time, they impart no permanent tension to the vessels implicated. The benefit which blisters have occasionally afforded seems to proceed from their direct stimulus to the vascular fibre, producing contraction of the dilated vessels; but as no invigorating power is permanently imparted, their utility is temporary, if they are not from time to time renewed.

The idea that the morbid affection originated in, and was confined to, the nerves themselves, and their branches, formerly gave rise to cross sections of the nerves, with the view of cutting off the communication with the brain. It is needless to say how often disappointment followed these incisions, however completely performed, because the seat of the neuralgia was not in the distal branches of the nerves, but somewhere central to them in the course of some of the bony or unyielding outlets of the cranium or spinal canal, if not in the brain itself. The operation spilled a little blood, and so took off the temporary pressure, while some irritative stimulus was given to the vascular tissue around, but no molecular or vital tone was imparted; on the contrary, after the stimulus of the operation was over, the paroxysms of

pain were often renewed with more violence than ever, the lesion which the parts had suffered only adding to the previous enervation and debility. We have no correct idea how mercury or arsenic, taken internally, acts upon the affected or other nerves; but we can fairly observe and appreciate their effects upon the blood-vessels, by their increasing capillary action, and giving more contractile vigor to congested and dilated vessels. This energetic effect relieves the associated nerves from pressure, wherever situated; but it will be more palpably displayed where the vessels are closely bound up or imprisoned with the nerves. The benefits resulting from moxas, or perpetual blisters, seem also to be owing to their continued diversion of the fluids from the subjacent or neighbouring vessels that are injuriously pressing upon the affected nerve, and not from any direct curative action which they have upon the nerve itself. It is also to be remarked, that in the great majority of cases of neuralgia the pain is very much increased, if additional pressure be made by the finger at the several points affected, where the nerve is emerging from a bony or other unyielding aperture, thereby corroborating the doctrine that a less pressure is the cause of a lower degree of pain. A severer pressure by the finger will also, in some cases, produce numbness and insensibility.

These, then, are shortly the views which I beg to offer concerning the topical nature of our well characterised neuralgiæ, especially those of the intermittent type. Irrespective of constitutional or other derangements, I conceive that they primarily consist in a hyperæmic and an atonic dilatation of the blood-vessels, which either surround or accompany the nerves affected through unyielding canals or apertures in bone, cartilage, or else through fibrous sheaths or fasciæ of more or less density or resistance—that the pain is occasioned by pressure or counterpressure, varying according to the phlogosis or fulness of the dilated vessel—that the intermittence depends on the diurnal or periodical nervous exhaustion or accumulation of excitability in the system—and lastly, that the above pathological view is confirmed by the effects of such tonics as bark, steel, arsenic, and mercury, taken internally, the action of all which is principally confined to the vascular system.

EFFICACY OF VACCINATION.

[The following letter, from the superintendent registrar of the parish of Birmingham, has been forwarded to us by Dr. Edward Johnstone. It contains some important facts relative to the effect of proper vaccination in preventing the occurrence of small-pox, and is, moreover, very creditable to the zeal of its author.—EDS.]

DEAR SIR,—You are aware that in the month of July, 1840, the royal assent was given to an act, 3rd and 4th Vic., c. 29, “to extend the practice of vaccination.” By that act, guardians of the poor in every parish are directed to contract with legally qualified medical practitioners for the vaccination of all persons resident in their respective parishes; and to remunerate such medical officers according to the number of persons who, not having been previously successfully vaccinated, shall be successfully vac-

nated by them. By the same act, any person convicted of producing, or attempting to produce, by inoculation or any other means whatsoever, the disease of small-pox, is subjected to imprisonment in the common gaol or house of correction for any period not exceeding one month.

The guardians of the poor of the parish of Birmingham were not slow to obey the injunctions of the Vaccination Act; they made arrangements for commencing operations with the year 1841 in a most efficient manner. Of the importance of the Vaccination Act to the welfare of the country at large, I presume there can scarcely be a difference of opinion; of its importance in the parish of Birmingham, and the necessity for its being promptly acted upon by the guardians of the poor in this parish, my position, as superintendent registrar, afforded me an opportunity of judging, which was not so open to other persons. At the time I am alluding to I deemed it prudent to confine my observations on the subject to a few professional gentlemen, lest an unnecessary alarm might be excited; it may now, however, be useful to record them.

During the quarter ending December 31, 1840, small-pox prevailed here to what appeared to me a frightful extent; it amounted to full 11 per cent. of the entire number of deaths in the parish; and in the most central district in the parish, out of ninety deaths in the same quarter, twenty-one deaths, or 23½ per cent., were registered as caused by small-pox. From the 1st of January to the 7th of February, in 1841, nine deaths from small-pox were registered in the same district, being equal to 20 per cent. of the whole number of deaths in that district during the same period; by March, however, this plague seemed to have been stayed. I now proceed to my chief and pleasing object in making this communication, which is to notice the apparently very successful result of carrying out with vigor the provisions of the Vaccination Act in this extensive parish.

During the first three months of 1841 more than 700 cases were successfully vaccinated by our medical officers, and the number so vaccinated in the whole year 1841 was 1481; in the year ending December 31, 1842, the number so vaccinated was 850.

Now, Sir, you will learn with pleasure that in the whole year, ending 31st December last (1842), only 10 deaths were registered in the entire parish of Birmingham as caused by small-pox, being about 1 in every 358 deaths instead of 1 in every 9 deaths, as was the case in the quarter ending December 31, 1840, to which I have before alluded. And I desire further to notice that not one of the ten deaths from small-pox, registered in the year 1842, has occurred since the month of April last, so that for many months it would appear that no death has been caused by small-pox in this parish. I will not, as a non-professional man, indulge in conclusions, or attempt deductions from these facts; I remember the adage, “Do not shout till you are out of the wood;” but surely there is very great encouragement to guardians of the poor, to the medical profession, to parents, and the public in general, to persevere in a course promising such important results, and to keep up a kind, although by no means a disinterested, watchfulness over the families of their poorer neighbours.

I will only add that I feel assured that although you may have been previously acquainted with the facts I have stated, you will, nevertheless, excuse my having addressed you on the present occasion.

I am, Sir,

Very respectfully,

HENRY KNIGHT.

To Edw. Johnstone, Esq., M.D.

Birmingham, Feb. 21, 1843.

TREATMENT OF ACUTE MANIA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In common with your readers at large, I feel deeply indebted to Mr. George Miller, in whom I fancy I recognise an old fellow student at Winchester, for the highly interesting case which he read before the Chichester Medical Society, and which he has so elegantly and ably reported in your Journal of the 4th instant. The case appears to have been one of acute mania, with the phenomenon of catalepsy superadded, and in this light the writer has evidently viewed and treated it, although he has designated it by the term of catalepsy alone.

Having had of late the opportunity of observing much of mania in its various forms and degrees, and having had also the practical management of some cases very similar to that most important and affecting one related by Mr. Miller, I feel in some measure justified in venturing to offer one or two suggestions on the case, chiefly with reference to the *treatment* to be pursued in the like melancholy instances of cerebral disease, both “so formidable and pitiable,” as Mr. M. justly characterises them.

It may not again fall to the lot of Mr. Miller to witness a scene so sad. Mania in this truly acute form does not often come under the notice of the practitioner in medicine. This case, however, strongly supports an opinion which I entertain myself, but by no means peculiar to myself, for I heard it verified in the summer of last year by Dr. Davy, one of the assistant physicians of the Hanwell County Asylum, that veritable acute mania is frequently, nay, if the exciting cause be taken into consideration, almost generally a disease attended by low typhoid symptoms—in other words, by an asthenic state of the vital powers rapidly succeeded by collapse. The case in question fully illustrates this; a strictly conscientious clergyman works himself up into a condition of highly *nervous* irritation and excitement, “deprived of sleep at night as well as considerably emaciated for want of proper nutriment;” he then becomes maniacal, in a state of corporeal exhaustion; this irritation passes on to vascular congestion of the brain, and even to meningeal inflammation. The early history of the case warrants this conclusion as to the then pathognomonic state, and the appearances within the cranium revealed on dissection, are those of the two latter serious affections. It were almost superfluous to say that both these conditions are often concurrent with, and produced by, an exhausted, or anæmial, state of the body; and, from the whole of the symptoms so well described by Mr. Miller, I submit that this was the true pathology of the present case.

I do not pretend to criticise or find fault with the treatment adopted by Mr. M. and the able physician whom he met in consultation; the entire medical management was most judicious and scientific. Nor do I assume that recovery could have taken place under any circumstances; but my experience authorises me in recommending the *earlier* administration of nourishment and support, if not of stimulants. As early as on the 21st of August I should have given something more than “tea, coffee, or arrow root;” the latter I should have combined with wine, and this too, very possibly, even if he would have taken animal food in the solid or fluid form; or I should have allowed porter or mild malt liquor in any other shape that he might have preferred. The *bitter beer*, as it is called, I have known to be greatly enjoyed and to prove an excellent tonic at such time. On the 25th and 26th, when he asked for wine, I question whether it would have been improper. The pulse on these days did not prohibit the trial.

Had the patient's system been thus supported, he could have borne *rather* more extensive *topical* depletion than was actually practised. From four to six ounces of blood abstracted by cupping-glasses, on the 26th, applied to the occiput or behind the ears might, perhaps, have proved servicable in relieving the congestion then plainly established.

It is to be regretted that mercury, known to be the most powerful remedy we have in subduing congestions of the blood, particularly in the encephalon, and when approximating to phlogosis or effusion, did not produce its specific influence. The difficulties in getting the remedy down by the mouth were, doubtless, very great, but friction with linim. or ung. hydrargyri, on various parts of the body, would have been practicable. The blistered surfaces, moreover, might have been dressed with pure calomel.

In the history of the case I cannot find when calomel “in small and repeated doses” was commenced; but I conclude that Mr. Miller has committed an error of the pen, in writing “calomel and opium to affect the mouth,” as having entered into the treatment.

I remain, Gentlemen,

Your obedient servant,

G. BURY.

Loughton, Essex, March 7, 1843.

MALFORMATION OF FŒTUS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you think the following curious case of congenital deformity worthy of insertion in your valuable Journal, it is quite at your service.

I remain, Gentlemen,

Yours sincerely,

JOHN MILTHORP.

Topcliffe, near Thirsk, Yorkshire.

Mrs. P. was taken in labor of her first child on the 23rd of September, 1842. The breast presented. To my great surprise, after one leg was brought down, no other could be found, although I examined very carefully. The fœtus, which was a seven months' one, lived about an hour (when born), and presented

an extraordinary spectacle. It had one lower extremity growing out of the middle of the pelvis. There was but one thigh-bone, and no rudiments of another limb. The connection of the thigh with the pelvis seemed to be of a fleshy character. There was no anus, nor any appearance of the organs of generation. The knee and ankle-joints were both perfect, but the limb gradually tapered away, and ended in a single great toe, occupying the centre of the foot. In all other respects the child was well formed, and of the usual size. The father of the child was of a strumous habit, and had an affection of the spine. I was not able to get the fœtus to make a preparation of it, which I very much wished to do.

March 6, 1843.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, MARCH 11, 1843.

The governing body of any great institution should be possessed of three qualities, which are essentially necessary to the well-being of the governed. These qualities are—honesty of purpose, wisdom of counsel, and consistency of conduct. The affairs of no public institution or company, be it great or small, can be conducted in a satisfactory manner unless the directors possess, as a body, the indispensable qualifications which we have just enumerated. But if these qualities be necessary in the guiding or governing body of any public institution, the directors of which are chosen by and subject to the commonalty, how much more essential are they to self-elected bodies, like the council of the College of Surgeons, who affect to hold power by a spurious species of divine right and perpetuate their domination, independent and regardless of those whose interests are entrusted to their keeping? Were we to examine the acts of the council and see how far they furnish evidence of honesty, wisdom, and consistency, we fear that our report, like a bankrupt's balance-sheet, must be full of nothingness. The qualities of the council can only be expressed in negative quantities; they are neither honest in their folly nor consistent in their lack of wisdom. It grieves us much to be forced thus to express ourselves concerning a *body* of men, for many of whom, as individuals, we entertain the highest respect; but without referring to bygone days and deeds, we must say that the recent proceedings of the college, with respect to medical education, are not much calculated to increase our opinion of their wisdom or administrative capabilities. Indeed, it is by no means easy to understand what the objects or motives of the council were when they executed their recent unseemly and extraordinary *pirouette*.

Within the last few years the efforts of the council have been ostensibly directed towards equalising and

elevating the standard of surgical education in the United Kingdom.

To the attainment of this desirable object they were, we believe, mainly urged by the College of Surgeons in Ireland; and in furtherance of it a meeting of delegates from the London, Dublin, and Edinburgh Colleges of Surgeons was held in London in the year 1838. At that meeting a certain improved course of education was agreed upon between the three colleges, and an engagement entered into for the due observance of the uniform plan, according to which a species of tripartite faculty of surgery was instituted for the United Kingdom. In the absence of legislative enactment on the subject, this mutual and voluntary fusion, if we may so call it, of the three colleges into one educational body was a wise and salutary measure; but the working of the measure mainly and obviously depended on the honesty and good faith with which the stipulations of the treaty might be observed. We shall presently see the "*Punica fides*" of the worthies at Lincoln's-inn; at first, however, they were quite enthusiastic in their love of reform. In addition to several changes of inferior note, candidates for the diploma of the college were compelled to have twenty-one instead of twelve months' hospital experience, and to attend, during the space of six months, the medical practice of an hospital or dispensary. This course of education was promulgated immediately after the conference between the colleges in 1838, at which it was also agreed that a further elevation of the standard of professional education should take place on some future occasion. Accordingly, we find that the College of Surgeons in London issued a new set of regulations in October, 1841, and announced that after October, 1842, candidates would *only* be admitted to examination under these regulations, except under peculiar circumstances of apparent hardship. One of the most prominent features of the rules promulgated in October, 1841, was the increasing the period of attendance at a surgical hospital to three years, and at a medical hospital to one year.

So far the intentions of the college appeared to be well directed, and their rules dictated in a spirit of wisdom; for whatever objection might be raised against the multiplying or extending courses of lectures, no one could cavil against the desire to make the candidate devote a considerable portion of his time to clinical study.

Although the demand thus made on the intellectual and pecuniary resources of the student was very considerably increased, we are not aware that any complaints were made, either on the part of students or the members of the profession. The former were content to undertake the new duties imposed on them by the college; the latter were probably not displeased at any regulations which had a tendency to restrain

the enormous influx of medical practitioners, manufactured during each year by the rival corporations. The extremity of our surprise may, therefore, be easily conceived, when, on the 18th of November, 1842, the council of the college published the following announcement:—

ROYAL COLLEGE OF SURGEONS IN LONDON.

The Court of Examiners having found that erroneous statements have lately been published respecting the mode in which gentlemen engaged in the practice of surgery may obtain the diploma of the college, and that other candidates for the diploma have experienced difficulty and inconvenience from inattention to the regulations, by which the required course of study has been, from time to time, augmented, or from inability to comply with those regulations, have resolved,—

“That gentlemen who were practising surgery prior to 1835 be admitted to examination on producing proofs of such anatomical and surgical education as may be deemed sufficient by the Court of Examiners.

“That other candidates be admitted to examination upon the production of the several certificates required by the regulations in force when they began their professional education by apprenticeship, or by attendance on lectures or hospital practice.”

EDMUND BELFOUR, Sec.

November 18, 1842.

If we test this regulation by the rule which we have laid down, it will be found to be most lamentably deficient. Is it the fruit of honest purpose, wise counsel, and consistent conduct? Assuredly not.

In 1841 the college publish a series of regulations, founded on the expediency of increased hospital attendance; a few months afterwards they commence violating secretly their published regulations, and when hard pushed by the press issue a document, which involves a principle of conduct totally at variance with the system which they had hitherto pursued. So much for consistency. As for the wisdom of the measure, we affirm that nothing could be less wise, expedient, or prudent, than the enactment of such a rule at a time when the constitution of the medical profession was about to undergo an extensive and radical change. The confidence of the profession in the administrative capabilities of the council, already shaken to its basis, has now completely vanished; and when the time of trial shall arrive, the college will be unable to find the most insignificant fraction of the profession to support them.

For the honesty of the measure we shall say no further than that it is a flagrant violation of the compact entered into in 1838, and an unworthy attempt to aid the poor-law commissioners in their war against the independence of the profession.

THE SYDENHAM SOCIETY.

Our readers will remember that some conversation took place at the last meeting of the Provincial Association relative to the expediency of establishing a

society for the republication of scarce, but standard, medical works. This idea has since then been taken up, and the result has been the formation of the Sydenham Society.

The society, according to the prospectus now before us, “will consist of an unlimited number of members.” We devoutly wish this consummation, but we hitherto thought that the sum of an infinite series could only be obtained by an algebraical formula. Each member will pay one guinea annually, and will be entitled to a copy of every work printed by the society during the time of his subscription.

The Sydenham Society has been founded for the purpose of meeting certain acknowledged deficiencies in the diffusion of medical literature which are not likely to be supplied by the efforts of individuals.

It will carry, we are informed, this object into effect by distributing among its members—

1. Reprints of standard English medical works, which are rare and expensive.
2. Miscellaneous selections from the ancient and from the earlier modern authors, reprinted or translated.
3. Digests of the most important matters contained in old and voluminous authors, British and foreign, with occasional biographical and bibliographical notices.
4. Translations of the Greek and Latin medical authors, and of works in the Arabic and other Eastern languages, accompanied, when it is thought desirable, by the original text.
5. Translations of recent foreign works of merit.
6. Original works of great merit, which might be very valuable as books of reference, but which would not otherwise be published, from not being likely to have a remunerating sale, such as classified bibliographies, and alphabetical indexes to periodical publications and other valuable voluminous works.

This is a very comprehensive scheme, and will require the exercise of sound discretion and experience to carry it to a successful issue. Gentlemen who are desirous of forwarding the views of the society, may communicate with the secretary, Mr. Burroughs, 31, George-street, Hanover-square.

In our next Number we shall publish the first of a short series of lectures on “Venereal Diseases,” delivered to the students of the Queen’s Hospital, Birmingham, by Mr. Langston Parker. These are the first provincial lectures which we publish, and we feel assured our readers will conclude with us that they are highly creditable to the professor and the school whence they emanate.

SHEFFIELD GENERAL INFIRMARY.

On the 27th ult. Dr. Ferguson Branson was elected one of the physicians to this institution, vacant by the resignation of Dr. G. C. Holland. The candidates were Dr. Branson, Dr. Harwood, and Dr. Bartolomé.

REVIEWS.

Pharmacologia; being an extended Inquiry into the Operations of Medicinal Bodies, upon which are founded the Theory and Art of Prescribing. By J. A. PARIS, M.D. Ninth Edition. London: Highley, 1843. pp. 622.

Our notice of the ninth edition of this well-known and popular work must be almost confined to the announcement of its appearance. It were superfluous to say anything in praise of a volume which has been distinguished beyond all others by public favor.

Much of the success of Dr. Paris's *Pharmacologia* depends on its value as a work of science; but a much greater share, on the elegant and brilliant style which adorns commonplace truths and gives a charm of the most pleasing kind to facts or illustrations that otherwise might have been passed over unheeded.

The present edition of Dr. Paris's *Pharmacologia* is not a mere reprint of those which have preceded it; the author is not a man to remain stationary while science is marching, or to neglect availing himself of the progress of events. Thus this edition is dedicated to Sir B. Brodie, instead of to Dr. Maton, defunct; and the discoveries by which chemistry and pharmacy have been enriched within the last few years are put into contribution, to render it consistent with the science of the day.

The third part, "On the theory and art of prescribing"—a subject which Dr. Paris has made completely his own—is, in this edition, enriched by a comprehensive table of the different substances which are usually considered as incompatible with the different articles of the *matéria medica*, and of the results of their mutual actions.

It were useless for us, as we have already said, to recommend in a special manner the work of Dr. Paris to the attention of our readers, because we are sure that it has found its place in the library of every intelligent practitioner in the kingdom.

ACADEMY OF SCIENCES, PARIS.

February 20, 1843.

STRUCTURE OF THE UTERUS.

M. Jobert read a memoir on this subject. The author endeavours to show that the uterus is formed by a *single* muscle, the fibres of which take various directions.

ADULTERATION OF MILK.

M. Donné presented an instrument which he calls lactoscope, and which indicates the quantity of cream contained in any given specimen of milk. The principle of this instrument depends on a property of milk. It is well known that the dull white color of milk is occasioned by the number of rich globules which it contains; and the greater the number of these globules, the richer is the milk in cream. Now, as the opacity of milk depends on the quantity of globules, the measure of this opacity will give the measure of the richness of the milk. The opacity,

however, cannot be appreciated in a fluid; only thin layers will serve for the purpose, and this is effected by the lactoscope. The instrument is composed of two parallel plates of looking-glass, which are brought together or removed from each other as required; the milk is placed between the plates, and the flame of a candle serves to measure the opacity, which is measured off on a graduated circle.

EXPERIMENTS ON THE TORPEDO.

M. Matteucci communicated the results of some new experiments on the torpedo, illustrative of the theory entertained by himself and M. de Blainville on the analogy between muscular contraction and electricity. He introduced a small quantity of the aqueous solution of opium into the stomach of the living torpedo; the tincture of nux vomica was likewise introduced into the stomach of another live torpedo. The two fishes, apparently dead, were soon afterwards removed from the water, and on their backs were placed two frogs (prepared in the way already described by the author), and the galvanometer. When the animal, or any part of it, was slightly touched, it contracted, and the torpedo furnished an electrical discharge, although before the experiment it required strong irritation to produce any effect.

The brain of a torpedo, much reduced in strength, was exposed, and an alkaline solution of potash applied on the fourth lobe. The torpedo died, giving forth very strong discharges.

The electrical organ was rapidly removed from a living torpedo, and prepared frogs were placed on the organ. On passing a knife into the organ, and dividing the smallest nervous filaments, the frogs leaped up, sometimes one, sometimes the other, according to the point of the electrical organ, which was cut. I had never before (says the author) seen in so perfect a manner the localised action of nervous filaments, nor had I ever witnessed so clearly the curious action of the electrical lobe of the brain. I received six torpedos, which were brought to me in a state of apparent inanition; the most active irritants failed to produce a discharge, for the animals seemed to have been destroyed by the cold. I exposed the brain, and on irritating the fourth lobe I obtained very powerful discharges. I cut up the electrical organ of a live torpedo in all directions, and applied the galvanometer to different points; the direction of the electrical current was invariably from the points nearest the back, towards the lower part of the belly. It is impossible to admit any analogy between the organ and piles, batteries, &c.

SHEFFIELD MEDICAL SOCIETY.

February 23, 1843.

Sir ARNOLD KNIGHT in the Chair.

CANCEROUS AFFECTION.

Mr. S. Parker exhibited a stomach, liver, and pancreas of scirrhus character, taken from the body of an unmarried female, aged fifty-seven. She had suffered from chronic gastritis for some years. On the 24th of May, 1842, the symptoms having increased, an examination took place, and a tumor about the size of a pullet's egg was found occupying the extreme right of the epigastric region. From this time she declined, and she constantly vomited in about two

hours after eating; bowels uniformly constipated. She died in February, 1843.

The body was very much emaciated. On opening the abdomen, the stomach was found much larger than natural, extending low down in the epigastrium, even into the iliac region; cardiac extremity healthy; pyloric very much thickened and contracted, and on the greater curvature at the pyloric end was a tumor closely attached to the peritoneum, and the abdominal muscles having a patulous opening communicating with the pylorus externally by a large, jagged, ulcerated cavity.

On the lesser curvature was another tumor, larger than the first, characteristic of the disease at an earlier period, being firmer, embracing the biliary ducts, extending backwards and to the right as far as the head of the pancreas, with which it was firmly connected, but not communicating internally with the pylorus. The liver rather smaller than natural, covered with scirrhous tubercles, varying in size from a pea to a walnut. The abdominal serous covering of the diaphragm was also studded with similar tubercles. The bronchial glands had also assumed the scirrhous character. Other viscera healthy.

Dr. Shearman, of Rotherham, afterwards read a communication entitled—

A CASE OF COMPLETE PARALYSIS OF THE OESOPHAGUS OF LONG STANDING, FOLLOWED BY HEMIPLEGIA, AND CURED BY ELECTRO-MAGNETISM.

Miss Cooper, aged fifty-one, had been suffering from tic douloureux of the superior maxillary nerve of the right side for some months, which had been relieved by large doses of quinine and a generous diet, was suddenly seized on the 31st of January, 1841, with an extraordinary attack of vomiting, accompanied by such nervous and muscular depression that she could not hold her head up to vomit by her own effort, and when she was supported upright for a few minutes it brought on syncope; this vomiting continued all that and the following day, in spite of every effort I used to allay it. She had the power of moving all her limbs whilst lying down, but the instant she was raised up she first lost the power over her arms, and then became faint.

On the evening of the 1st of February she found it quite impossible to swallow either fluid or solid matter, and the sickness subsided. This paralysis of the oesophagus came on suddenly, as she had, up to that time, taken a large quantity of medicine of various kinds, particularly in the form of saline draughts. She had no pain, tenderness, or heat in the head, stomach, or any other part of the body; her pulse was rather full and wiry, at 100; her bowels had been attended to closely every day, the excretions were healthy in appearance; menstruation had ceased for some time; she passed her urine as usual, and that secretion was also healthy; tongue rather red, but not furred. I immediately introduced an oesophagus tube, connected with Read's syringe, and pumped some food into her stomach, which remained, and relieved the great state of exhaustion she was then in. On the following day, after having had some nourishment administered in this manner, I found she could walk and also use her arms, which proves that, up to this time, there was no disease in the spinal cord. Suspecting some congestion, or

disease, at the origin, or in the course of the par vagum, I applied leeches to the temples, and cupped the back of the neck; acted freely on the bowels with mercurial purgatives; blistered the spine; applied mustard cataplasms to the scrobiculae cordis; and, in fact, treated the case as I should one of palsy succeeding a slight fit of apoplexy. There was great difficulty in administering remedies, because nothing could be got into the stomach but by injecting through the oesophagus tube, and in a few days I found it necessary to administer nourishment as often as every four hours, night and day, so great was the exhaustion.

Towards the end of the fourth day after the loss of action in the oesophagus, I perceived the mouth drawn to the right side of the face, and the left side of the face became very cold; she had difficulty in speaking; could not close the left eyelid; and her left ear was deaf. The following day the right leg became cold, and in a couple of days more the right arm and leg were paralysed, and perfectly useless. These symptoms gradually increased, and she became dreadfully feeble. Stimulants, both external and internal, had no effect.

On the 20th of February I called Sir Arnold Knight in to my assistance; he recommended the continuance of the stimulating plan, but thought, with me, there was very little, if any, chance of improvement; indeed, it seemed then a most deplorably hopeless case.

On the 25th of February, with the sanction of Sir Arnold Knight, I began to apply electro-magnetism from the top and back of the neck along the course of the oesophagus and left side of the face, and from the spine along the course of the nerves of the right arm and leg. I continued its application an hour, at least, three times a-day, and injected nourishing food, such as strong beef tea with wine or brandy, into her stomach every four hours.

On the 4th of March (eight days after the first application of electro-magnetism) the patient began to swallow, and the following day she could swallow so well that I had no occasion to inject food again into her stomach. I continued the electro-magnetism three times a day for at least a month; then twice a day, giving her pretty good doses of quinine and other stimulating tonics occasionally, with plenty of nourishment, paying great attention to the digestive organs; and in the course of about a month I had the pleasure to find her arm begin to show more animal heat; then the leg became warmer; the symptoms now gradually improved until at last, on the 26th of June, she could walk up and down stairs tolerably well. At this time I gradually left off the electro-magnetic influence; she got out into the air, went to the seaside, and returned in as good health as I had seen her for many years. She is, at this moment (20th of February, 1843) quite well; can walk three or four miles a-day without fatigue, although last year she had a violent attack of pneumonia, for which I was obliged to bleed her twice in the arm and give her large doses of tartarised antimony.

I am induced to think this is a case rarely seen by practitioners; for during its course, Sir Arnold Knight and I consulted all the authorities within our reach in vain; and I have never met with a medical friend who

has seen a similar case. It is not improbable that the fifth, seventh, eighth, and perhaps the ninth pairs of cerebral nerves were in an abnormal state as well as the spinal cord; and as both motion and sensation were lost, the double origin of the nerves were equally affected. It is also remarkable that the left side of the face and the right side of the body should have been paralysed at the same time. What the pathological condition of the brain and nerves was I do not presume to insinuate, particularly after the opinion of so high an authority as Dr. Abercrombie, of Edinburgh, to whom I referred the case while it was going on, and who very kindly took great interest in it. He says, "In regard to the state of the cord in Miss Cooper's case I am quite at a loss; but the truth is, that the more I see of these cases I am the more perplexed by them. In many I have found extensive softening of the cord; but in others have not been able to trace the slightest appearance of disease in any part of the cord or its membranes, even when the affection had been of many years' standing. There could have been no softening in Miss Cooper's case; but as to what there was we can only conjecture. In the brain, I have long been of opinion that apoplexy often arises from a state of the circulation alone, without any structural disease; and some facts have occurred to me which induce me to think it probable that palsy, to a certain extent, may be produced in the same manner. If this occurs in the brain there appears to be no reason why it should not take place in the cord." As to the effect of electro-magnetism I think no one who saw the progressive improvement after we began its use could doubt its power; and Dr. Abercrombie says, in reference to this subject, "Many thanks for your kind attention in sending me an account of this most interesting case. I have seen some effects from the treatment you mention, and have heard of cases more striking than my own, but yours is by much the most remarkable. I shall be anxious to give the practice a more extensive trial."

PATHOLOGICAL SOCIETY OF DUBLIN.

January 8, 1842.

ATROPHIA ABLACTATORIUM.

Dr. Lees made some remarks on the disease of children, described by Dr. Cheyne under the name atrophie ablactatorium; and exhibited to the society the intestines of a child of three or four months old, which had been deserted, and was received into the South Union Workhouse, where it was spoon-fed; but notwithstanding the attention paid to it marasmus supervened, and it died in a fortnight from its admission, with the usual symptoms of the atrophie ablactatorium, as described by Dr. Cheyne in his essay on the bowel complaints of children. It was remarkable, however, that although Dr. Cheyne relates several dissections, yet he has altogether omitted to describe the condition of the mucous membrane in this disease. In this case Dr. Lees found extensive deposition of lymph, with superficial excoriation and ulceration throughout the rectum; the Peyerian glands of lower portion of ileum and those immediately above the ilio-cæcal valve were hypertrophied, and many of them dotted with minute ulcers. The deposit appeared in the large intestines only; in the stomach and the

upper part of the intestinal tube the mucous membrane was healthy; the liver exhibited no diseased condition; the gall-bladder was filled with bile of a dark green color. Dr. Lees offered as a probable conjecture, that in cases of this kind the nutritious matter which should have been absorbed before reaching the large intestine, arriving there unchanged, may act as a foreign body and excite this peculiar inflammation.

ANEURYSM OF ABDOMINAL AORTA OPENING INTO LUNGS.

Dr. Stokes said the specimens he then produced to the society were of great pathological interest; they belonged to a case of aneurysm of the abdominal aorta at the commencement of its course, immediately under or between the crura of the diaphragm, and exhibiting a mode of termination that had not as yet been described. In some cases of this affection the opening has been into the pleura; in others, into the stomach, into the peritoneum, or behind the peritoneum, forming tumors. In the case now communicated by Dr. Stokes, the aneurysm had opened into the substance of the lung; the subject of the case had been first seen by Mr. Pakenham, and subsequently by Mr. Colles and Dr. Stokes. He complained of intolerable pain in the lumbar region, which was aggravated by motion, but relieved by lying with the back towards the fire, or by turning on the face. There was strong pulsation in the epigastrium, and a strong bruit de soufflet or bellows murmur. From all the symptoms, Mr. Pakenham considered the case to be one of aneurysm of the abdominal aorta, in consequence of which the consultation was determined on. Dr. Stokes ascertained that the patient had been complaining for eighteen months, and that he suffered pain of two distinct kinds, one of which was dull and was constantly felt; the other was a violent lancinating pain, which only occurred in paroxysms, often darted downwards into the scrotum, and was not observed for the first time until three months after the other had commenced. The seat of pain was along six vertebræ, the three last dorsal, and the three contiguous lumbar; the pain was increased by pressure on any part of that tract, or by any motion of the spine; a little to the left of the epigastrium was the tumor, in which could be felt a pulsation, evidently coincident with the diastole of the heart; when deep pressure was made there was an extreme diastolic force perceptible; the bruit de soufflet was increased by motion, and was not audible posteriorly; the pulse was regular, about 80 in the minute; the appetite bad; towards the termination of the case there was pain in the right shoulder. The patient died on this day (January 8) in a state between syncope and asphyxia, after expectorating a large quantity of blood. On the preceding day his appearance was very haggard, the tumor was pulsating violently, and, contrary to what is usual in these cases, the pulse was singularly rapid.

When the body was opened, a small quantity blood was found in the stomach, which had probably been swallowed in the last agonies of life; there was no effusion into any of the serous cavities. The lung was prodigiously gorged with blood, much of which had been poured into the bronchial tubes; the surface of the lung was abraded when it was in contact with the aneurysm. The aneurysm itself was not very

large; it was situated immediately between the crura of the diaphragm, between which it passed upwards until it came into contact with the inferior lobe of the lung; the aperture in the artery was in its anterior wall. There was no perforation of the diaphragm by absorption, but the tumor had forced its way upwards between the crura, merely dissecting through cellular connections.

Dr. Stokes concluded by remarking, that there were three circumstances in this case which rendered it of great value; first, the diagnosis of the aneurysm from symptoms; second, the confirmation of the stethoscopic signs; third, the peculiar mode of termination, which, as he stated at the commencement, had not been previously described by any pathologist.

DISEASE OF MITRAL VALVES.

Mr. Adams communicated a case of disease of the mitral valves. The subject was a gentleman temperate in his habits, but who had formerly suffered repeated syphilitic attacks, for which he had undergone several mercurial courses. About six years ago he began to feel a difficulty of breathing, and afterwards hæmoptysis and palpitations. Three months ago (on the 3rd of September), while turning in his bed, he perceived a remarkable irregularity in the action of the heart. A few weeks back he came to Dublin, and applied for advice to Mr. Adams, who, on examining him, found that his limbs were anasarcaous, and there were evident symptoms of a disease of the heart, but it was doubtful whether it were aneurysm or disease of the valves. The second sound of the heart was accompanied by a sound like that observed in cases of aneurysm. A consultation was then held with Dr. Stokes, who was of opinion that the mitral valves were diseased, and that the death would be very sudden. The treatment adopted consisted in the exhibition of small doses of calomel, squill, and digitalis, together with small bleedings by leeches, which were used in preference to small bleedings from the arm, in consequence of the patient's statement that venesection caused him to faint, and this is objectionable in diseases of the heart. At this time, although the action of the heart was violent, the pulse at the wrist was very weak, the respiration was generally sound, but at night dyspnoea occurred in paroxysms. The death was very sudden; it occurred soon after breakfast, while the patient was on the night-chair. The left ventricle was found to be considerably dilated, and the mitral valves indurated, thickened, and infiltrated with a yellowish material, which, in some parts, was ossified. The appearances were well delineated in a drawing produced by Mr. Adams.—*Dub. Journ. Med. Sci.*, March, 1843.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

February 1, 1843.

Observations on Impulsive Insanity. By Dr. MACKINNON.

Dr. Mackinnon remarked that insanity was occasionally displayed in an impulse to commit such acts as suicide, homicide, theft, fire-raising, &c., without any *delusion* of the understanding, in the common sense of the term, being present. Medical and legal

writers, for a long period, exclusively regarded the intellectual faculties, when treating of mental derangement, and omitted all reference to the moral feelings—a part of the mental constitution at least equal in importance to the former. Thus monomania of the intellect was allowed, while monomania of the moral feelings was disregarded. The fact was, however, as remarked by Pritchard, that derangement of the moral feelings was fully more characteristic of insanity than delusion of the intellect. Among the inmates of an asylum, many are always found in whom this moral derangement exists in a greater degree than the intellectual. These prepare us for cases in which the derangement is *exclusively* in the moral part of the mental constitution. It certainly was sometimes a matter of extreme difficulty to distinguish such cases from others in which criminal acts were committed, for which the perpetrator was justly responsible. The best guides in the diagnosis were the existence or not of hereditary predisposition to mental disease, the presence or absence of the usual motives to crime, the consistency or inconsistency of the acts committed with the previous character of the individual, and, above all, the presence or absence of the physical signs of insanity, such as heat of head, injection of conjunctiva, furred tongue, and derangement of the cuticular and other secretions of the body. Dr. M. proceeded to give examples of impulsive insanity which had come under his observation. In the first case the *morale* was altogether deranged, and a disposition to commit both homicide and suicide exhibited, while the intellectual faculties, so far from being impaired, were above the average. Hereditary predisposition (a parent committed suicide), and the physical signs of disease were present. In the next case homicidal and suicidal propensities were felt, reasoned on, and deeply regretted by the patient, whose mind was of the highest order. In this case the physical signs of the disease were absent, and would have rendered it a matter of extreme difficulty to have sustained the plea of insanity if homicide had been committed. The whole history, however, conclusively showed a state of mental disease. In the next case the fire-raising and homicidal propensities were displayed. The physical signs were present. In the last case, detailed at length, a propensity to theft, and a wholly perverted *morale*, were exhibited. Dr. M. alluded to other cases of the same interesting and, in a medico-legal point of view, most important form of insanity.—*Edinburgh Monthly Journal*.

TREATMENT OF SALIVATION.

To combat mercurial salivation, I prefer applying acid. hydrochlor. fort. to the gums and tongue when they are ulcerated, repeating the application every day, or every other day. The bleeding of the surface ought not to be an obstacle. The acute pain it produces soon ceases, and nothing equals its beneficial effects. Of course the peculiar indications which may present themselves must not be neglected.—*M. Ricord on Venereal*.

RETROSPECT OF THE MEDICAL SCIENCES.

TUBERCLES OF THE SEROUS MEMBRANES.

In a communication published in the "*Archives Générales de Médecine*," M. Briquet, the physician to the Hôpital Cochin, narrates three cases of tubercles and encephaloid tumors on the serous membranes terminating fatally, which occurred in his practice in the hospital, and from which he draws certain deductions.

Bayle was the first who described the formation of these heterologous productions in a precise manner. He mentions the hard and rounded granulations which are formed on the peritoneum as a consequence of chronic peritonitis, and appear to constitute a part of the serous membrane, but can be removed by scraping with a scalpel. He considered them to be merely a transformation of the exuded matter. Broussais and Laennec have also described such cases, as well as Cruveilhier, Andral, Louis, Lombard, and Chomel. As far, then, as pathological anatomy is concerned, these granulations are well known, but much uncertainty and difference of opinion exists among medical men with reference to their pathology, more especially as regards the causes that produce them. By some they are looked upon as a direct effect of inflammation, while by others they are supposed to spring from the false membranes secondarily, and by a process which has not any affinity with inflammation. It has also been believed that these heterologous productions are found in the serous membranes only after the system has been affected for a long time, and evidently modified by the existence of a similar disease in one of the principal organs. On both points M. Briquet expresses a decided opinion, he regarding the tubercular and encephaloid formation on the serous membranes as the direct result of inflammation, and fully capable of appearing previous to a similar condition obtaining in any part of the organic system. He supports these opinions by the detail of cases which he has treated, and by others selected from the works of Broussais and Andral. That they are the results of inflammation, and that of a chronic character, he concludes, because they are always situate on the free surface of the serous membranes, that they are found almost exclusively on those membranes, which have been the seat of pain and other symptoms of phlogosis, and in the greatest number in that part of the membrane which showed the strongest signs of inflammatory action, and finally, that they do not exist in the false membranes, but spring directly from the surface of the serous membrane, there not being any false membrane in or about them by which they could be enveloped, or of which they might have been a transformation.

Inflammation of the serous membranes, inducing the formation of heterologous productions, is commonly accompanied by dropsy, presenting symptoms and progress so characteristic as to afford a means of diagnosis. The first class of symptoms which present themselves have reference to the phlegmasia, the others to the progress of the effusion. If the disease commence in the chest, there is experienced a more or less severe pain in the side during repose, and on

drawing a deep breath; percussion and auscultation next indicate the existence of a fluid in the cavity of the pleura, which is shown by the bronchial respiration, and the modification of the voice, to have been formed very rapidly. If the abdomen be first affected, tension of the parietes is observed, with more or less fixed pain, and constant sensibility on pressure. Dulness on percussion is also experienced in one part of the abdomen, and which continues the same, however the position of the patient be changed. Finally, the tumefaction of the abdomen is irregular, and fluctuation is not perceived until long after the commencement of the disease. The phenomena indicative of the dropsical effusion are equally characteristic, the chief being the long-continued existence of a collection of fluid in the serous cavities, before the occurrence of general anasarca. This state not being in accordance with the usual progress of dropsies, Dr. Briquet thinks it may be regarded as characteristic of the effusion following tubercular or encephaloid disease.

With respect to treatment, M. Briquet is inclined to rely almost entirely on the repeated application of blisters. Tonics and stimulants he has found aggravate the disease, while, although its cause be of an inflammatory nature, the complaint is so modified by the heterologous formations as to admit of the antiphlogistic plan being adopted only as a palliative.

LACERATION OF THE PULMONARY ARTERY.

Dr. Helmbrecht, a military surgeon at Mayence, records the case of a young soldier, named Hoffmann, who, during a long march, complained from time to time of slight dyspnoea, to which he afterwards became subject on occasional fatigue. A few months after the first appearance of this symptom, having been employed for some hours in the day carrying wood, he awoke towards morning with a severe pain under the right side of the sternum, and a more intense degree of dyspnoea than previously, accompanied with considerable anxiety, spasmodic action of the respiratory organs, and an earnest desire for air. This state continued for a few minutes only, and was followed by great exhaustion and weakness, feeble and quickened pulse, cold sweats, features pale and expressive of the greatest anxiety, persistence of the dyspnoea, and sudden lowering of the heat of the skin. The pain at the sternum was changed into a disagreeable sensation in the precordial region, accompanied with scarcely perceptible palpitations. The patient was bled, and a sinapism applied to the chest. The blood consisted of an enormous proportion of serum, and very little crassamentum; it contained a large quantity of air-bubbles. The pulse rose and became fuller after the bleeding, and the patient was more tranquil. Towards evening he slept for a few hours, waking at eleven, p.m., and complaining of great prostration. He died in a few minutes, there being scarcely time to summon the surgeon before he was dead.

On opening the chest, the heart appeared to be very large, so that at first sight it seemed to be hypertrophied, but on slitting open the pericardium, this membrane was found to have been distended

with a considerable quantity of coagulated blood. The heart itself was healthy, with the exception of much fat on its surface, and slight thickening of the parietes of the left ventricle. At the origin of the pulmonary artery there were externally, and in the direction of the axis of this vessel, stony concretions covered with cellular tissue, and turned towards the right ventricle; they were rather more than an inch in length. At the origin of this artery, the internal membrane was detached from its subjacent elastic coat to the extent of about four inches, was torn, and its lacerated edges floated loosely in the interior of the vessel, diminishing its calibre. It was covered throughout its whole extent with a thin layer of fibrine. At the origin of this artery, at the part where the concretions terminated, there was a solution of continuity about a third of an inch in diameter, whence had escaped the blood effused into the pericardium; this opening was circumscribed by a deep red tint.

The lungs were exsanguineous, healthy in structure, and contained much air. The abdominal viscera were normal, with the exception that the liver was exceedingly large, and gorged with blood; the gall-bladder contained a large quantity of bile. The brain was soft, and its vessels were nearly empty of blood.

—Casper's *Wochenschrift*.

CATARACT.

In a brief communication on the operation for depressing cataract, Mr. Morgan recommends a proceeding to be adopted which has hitherto been regarded as a proof of awkwardness and *gaucherie* in the surgeon when it occurred. He advises the transfixing the crystalline lens with the needle, as by doing so the surgeon has a greater command over it, and can direct its descending course with perfect certainty, so that the only portion of the vitreous humor at all disturbed is that and that only which must necessarily give way in the descent of the cataract; all the surrounding hyaloid structure remaining unbroken and uninjured, and from this cause he believes the subsequent ascent of the lens is prevented. He has adopted this mode of operating in about thirty cases, nearly every one of which has terminated in the most favorable manner, as well in respect to the absence of subsequent inflammatory symptoms of a serious nature, as to the attainment of the ultimate object of the operation. Mr. Egerton, of Calcutta, who first directed Mr. Morgan's attention to the advantages of this plan, says he has pursued it with success for many years in India, and in the whole of his practice, which has been very extensive, he has scarcely met with a case in which the cataract rose after he had depressed it.

The operation is performed in the following manner:—the pupillary aperture having been dilated by the application of belladonna to the eyebrow, the patient is to be placed as in cases for operation for depression, the eye to be operated on being towards the light, and the head of the patient fixed by an assistant opposite to the breast of the operator, and against his own. Mr. Morgan prefers the sitting to the recumbent posture, except in operations for extraction, as there is an advantage gained by seeing down into the globe, as the lens is depressed to its destination. The needle which he uses is extremely fine, of the same thickness from the point to the handle, cutting at the point but

not at the sides, and hardly larger than the diameter of the globe. Mr. Morgan finds a very short needle much more convenient in operating on the eye than a long one. The point of the instrument is now to be passed through the sclerótica, at the distance of rather more than a line from its junction with the cornea and just below its transverse diameter; it is then to be carried, with a slight inclination forwards, directly through the central substance of the cataract, completely transfixing the lens. This part of the operation requires a good deal of careful management; the object will be to disturb surrounding parts as little as possible, by transfixing the lens *in situ*; and this is to be effected not by pushing the point of the needle at once directly onwards, but by carefully drilling its way through the opaque body by rotating the handle of the instrument as it is held between the thumb and forefinger, while the point at the same time is gently urged onwards. Having thus ensured complete transfixion by drilling, the first step of the operation is accomplished; and the second can now be performed with the greatest ease and precision—that is, the dislocation and depression of the lens, which must of necessity follow the exact course of the point of the instrument by which it is impaled; and as the needle has been introduced below its transverse diameter, it will be *pulled* instead of *pushed* down, and thus be effectually prevented turning on its axis into the vitreous humor as it is descending—an occurrence which will sometimes take place during the operation as at present performed, and which, for obvious reasons, it is desirable to guard against. Another advantage gained by transfixion is, that all chance of injuring the retina by the pressure of the lens, either from its slipping from the point of the instrument during the operation, or from its having been unconsciously left resting on that membrane after its completion, all danger of amaurosis from such causes is removed; for there is such perfect command over the opaque body that the exact course it will take in its descent can be determined to the greatest nicety, as well as the precise situation in which it will be left after the needle is withdrawn. The course should be so directed that the anterior surface of the lens passes hardly a line distant from the corpus ciliare and retina, taking a curved sweep as it descends, corresponding with the concave curvature of the interior of the globe; and it should be left as nearly as possible with its upper circumference a line below the lower edge of the widely-dilated pupil; very great care is required in disentangling the instrument from the cataract as it is being withdrawn from the globe; and this should be done by drilling the needle *out* from the depressed lens as it lies, without changing the direction of the handle of the instrument till it has been liberated in the same manner as it had been drilled *in*, while the lens was *in situ*; for by neglecting this precaution, the lens will follow the point of the instrument, and be either raised again or forcibly dragged against the retina, as the instrument is drilled out. Should any portion of an opaque capsule remain in the pupillary aperture after depression, it should be brought into the anterior chamber, if possible, with the point of the needle, before it is withdrawn from the globe, after it has been disentangled from the lens, but much caution is requisite in cutting up a posterior capsule, lest the

cells of the vitreous humor be broken up, as their integrity is essential to the success of the operation by depression.—*Guy's Hospital Reports*.

LITHOTOMY.

A man of the name of Boulanger, sixty years of age, was admitted into the Hôtel-Dieu at Paris, presenting all the symptoms of stone in the bladder, the existence of which in that viscus was further proved by catheterism, by which it was discovered to be of large size. He consented to undergo the operation of lithotomy, having refused lithotrity a year previously. The operation was performed in the usual way, but the extraction of the stone was painful and difficult. It had a flattened, elongated form; its larger diameter was nearly two inches, its smaller an inch and a half; its greater circumference nearly five inches, its smaller rather more than four. It was of a greyish-brown color, and appeared to be formed of uric acid; it weighed fifty-seven scruples.

The patient survived the operation fifty-three hours.

On examination of the body, the bladder was found to be very large, and another stone was discovered in it on introducing the catheter. This weighed sixty-two scruples; its shape was triangular, with rounded angles, and it had a slight depression on the middle of its surfaces. It was nearly two inches high, and an inch and a half wide at the base, and its larger circumference was nearly five inches, the smaller being about four. The parietes of the bladder were much thickened, and contained three cells, in each of which was a calculus, about as large as a nut, projecting slightly into the cavity. The mucous membrane of the bladder was perfectly healthy, and not at all softened. The wound made in the viscus was of moderate size, and clean; there was a slight infiltration of pus in the cellular tissue of the pelvis.—*Gazette Médicale*, Nov. 1842.

ANALYSIS OF POLYPUS VAGINÆ.

M. Girardin, of Rouen, has published, in the "*Journal de Pharmacie et de Chimie*," the analysis of a polypus which had been removed from the vagina. It was very round and smooth, about three inches and three-quarters in diameter, enveloped in a smooth thin membrane, like the internal membrane of the vagina, and easily lacerable; it adhered by a pedicle nine lines long to the posterior paries of the vagina, just above the fourchette. A very fine and scarce cellular tissue lay immediately below the enveloping membrane, and permitted the ready removal of the polypous growth. It was formed entirely of a whitish, granular tissue, looking something between dense fat and colorless fibrine, fragile, as friable as the liver, without distinct fibres or partitions; the central part and the circumference were precisely the same. This homogeneous mass was traversed by rather large arterial and venous vessels; the pedicle contained these vessels, and also a dense and abundant cellular tissue.

From M. Girardin's experiments, it appeared that this polypus was entirely composed of fibrine, together with very small quantities of fatty matter, of hæmotosine and phosphate of lime, showing evidently that it had been formed at the expense of the fibrine of the blood, which had been gradually separated from the other components of that fluid.

POISONING BY ARSENICAL OINTMENT.

M. Errard, of Injurieux, Ain, details, in the "*Ga-*

zette Médicale," two cases of poisoning by an arsenical ointment, which had been used to dress blisters with. One of the cases terminated fatally. A man, fifty-three years of age, was recovering from an attack of pneumonia for which he had been freely bled and blistered, when Dr. Errard was sent for to him in a great hurry; he was complaining of his arms, which were very painful, red, and inflamed; his tongue was red, dry, and chapped; thirst intense; he suffered from colics unattended with stools; the pulse was small, irregular, and frequent; and the patient had headache, and involuntary contractions of the muscles of the lower extremities and back. The blisters on the arms had been dressed the day before with the ointment in question. The patient died in the course of the evening. About a week afterwards, a similar set of symptoms showed themselves in the person of a young lady who had had a blister of the thigh dressed with the same ointment. She recovered under the use of baths, lavements, anodynes, &c. A third case having also occurred in M. Errard's practice, he was induced to institute inquiries relative to the preparation of the ointment which had been used. He ascertained that it had been procured in each instance from the same house, and there he learned that it had been made with the ends of wax candles, in the composition of which there was a certain proportion of arsenious acid.

A RARE FORM OF CARCINOMA.

The following case, of a diffuse form of carcinoma with cutaneous tumors, occurred in the practice of Mr. Sumner, of Lymm, in Cheshire. The patient was a female of the name of Ann Aspey, an ostler's wife, residing at Hoo-green, near Knutsford. She was fifty-six years of age, had had a large family, and had enjoyed good health. The first symptom of her indisposition was the appearance of small tumors, not larger than peas, in the right groin. These gradually increased in size until the period of her death, when they had attained the size of pullet's eggs, and were the largest tumors on the body. They were the seat of occasional pain. When she consulted Mr. Sumner, in March, 1839, other tumors had made their appearance immediately under the skin, on the fore and back parts of the trunk, and especially about the mammae. These glands, on taking hold of them, gave the sensation of handling a bag of marbles. As the disease progressed, tumors showed themselves in other parts of the body. In the beginning of the complaint there was but little uneasiness, but as the disease advanced the constitution manifestly suffered. The appetite failed, the bowels became constipated, and the secretions sparing. There was considerable pain experienced on pressure being made over the epigastric region, and the food was rejected as soon as taken. The tongue had the appearance of raw meat. In this state she continued a fortnight, when she sunk. On inspection after death, the tumors were found to pervade the body. Besides their existence on the surface in the muscular and cellular tissues, they were found in clusters on the heart, and the peritoneum and folds of the mesentery were thickly studded with them. Preparations were made of the heart and inguinal tumors.—*Medical Gazette*, Feb. 24, 1843.

IODURET OF POTASSIUM IN RHEUMATISM.

Dr. Aubrun states that his experience with this remedy in the treatment of rheumatism warrants him in concluding that it is very efficacious in the acute form, and in weak subjects may constitute the entire medication, it not being necessary to have recourse to the abstraction of blood, but in plethoric people it is advisable to premise one or two large venesections, and not to commence with the ioduret till towards the second week. By this plan the patients are less likely to have the stiffness of the muscles and the enlargements of the joints, which are so often the sequence of rheumatism, and which are so difficult of cure. The dose in which it is given varies with the constitution of the individual, but in general the medical man may begin with one or two scruples a-day, and gradually raise it to six or eight, if nothing occur to prevent it. Dr. Aubrun has employed the ioduret almost exclusively in men, and has never observed any effects produced by it on the testicles, either as regards their size or their activity of function.

The symptoms it produces are as follows:—A slight increase of the saliva, a sensation of bitterness in the mouth, with more or less heat, redness, and pain in the throat, the tonsils remaining in a healthy state, and a slight degree of inflammation of the conjunctiva and pituitary membrane.

The action of the ioduret of potassium is entirely hyposthenic and resolvent; it is more active in enfeebled patients, and in those who have been previously treated by venesections.—*Gazette Medicale*, Dec. 1842.

PAROCHIAL MEDICAL RELIEF.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—As the existing parochial engagements with medical men by the several boards of guardians are drawing to a close, and no strict or well-defined regulations of the poor-law commissioners are yet made to control future contracts, the poor and the profession are neither of them likely to derive the intended advantage of the commissioners' recommendation of March last, inasmuch as some boards are attempting to deduct nigh ten per cent. from the last year's salaries, and those made under tender, in consideration of fractures and capital operations being made liable to extra charge.

It is particularly desirable to know if it is positively determined that all future appointments shall be made for life, or left to the option of the guardians; for without some positive orders from Somerset-house, it is becoming evident that the guardians will only adopt such part of the commissioners' recommendations as may suit their own interests exclusively.

The system of persecution and resentment evinced by guardians towards any member of the profession for questioning the justice of their proceedings, preclude an individual from personal application to the

commissioners for redress, whilst it is in your power, in a public capacity, to make the inquiry on a matter so highly interesting to numerous members of the Provincial Medical Association, and amongst others,

Your most obedient servant,
A MEMBER THEREOF.

WESTMINSTER HOSPITAL.

Dr. Kingston has been elected one of the physicians to this hospital, after a short contest with Dr. Basham, by a majority of fourteen votes.

PHARMACEUTICAL SOCIETY.

Her Majesty has been pleased to grant a charter of incorporation to this society. The efforts of Mr. Bell have been thus crowned with success, but we much question the propriety of any charter being given at the present juncture to any body connected, however remotely, with the medical profession.

OBITUARIES.

On the 7th instant, Sir James Leighton, M.D., late physician to the Emperor of Russia.

We have to announce, with feelings of the deepest regret and sorrow, the death of Dr. Macartney, of Dublin, which took place on Sunday last, at his residence in Merriion-street, Dublin. The cause of this melancholy event was probably apoplexy, for Dr. Macartney was left in a state of excellent health on Saturday night, and was found unconscious on the following morning.

PROMOTIONS AND APPOINTMENTS.

NAVAL.

Surgeon—John J. D. Burns, to the Sappho.
Assistant-surgeons—Charles Coffey, to the Sappho;
J. Davidson, to the Tartarus.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, March 3, 1843.

J. G. Devis, F. Bellamy, P. T. Kempson, F. W. Osborne, A. Lamb, C. N. Instan, T. Worth, W. Paterson, S. Payser, J. Shaw, G. Fisher.

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TO CORRESPONDENTS.

The inquiry relative to the remedy for worms shall be made, and our correspondent shall receive a private answer.

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CLINICAL LECTURES

ON

SYPHILITIC DISEASES,

DELIVERED AT THE QUEEN'S CLINICAL HOSPITAL,
BIRMINGHAM.

By LANGSTON PARKER, Esq.,
Surgeon to the Queen's Hospital, &c.

Lecture I.

PRIMARY VENEREAL DISEASES CHARACTERISED BY
DISCHARGES.

GENTLEMEN,—It will be recollected that the series of clinical lectures, of which this forms a part, are directed especially to the students of the Queen's Hospital; that they will be composed entirely for their instruction, and, hence, must be suited more to the attainments of the student than to the experience of the practitioner. Hence, in the detail and explanation of any case related to students it becomes constantly necessary to digress and explain first principles in the treatment of disease; and, therefore, I have found it necessary to enter occasionally rather fully into the consideration of many points, which, although familiar to the experienced surgeon, are perfectly new to the student, who hears them in all probability for the first time. For instance, I have found it necessary to say in one part of my lectures, "Under such circumstances it will be proper to submit your patient to a course of mercury, which is to be conducted according to the rules which guide us in the administration of mercury generally in such cases." This, to the person who hears it for the first time, is comparatively unintelligible; he is told of the value of a disease, and directed to treat his patient by a course of mercury, which is to be conducted with the usual precautions; but without a full explanation to him of the mode in which the mercurial course is to be managed, the quantity to be given, of the rules to be observed, the precautions to be used, and a great many other points, all essential to the success of his treatment, the other direction is almost worse than useless. Again, in speaking of syphilis, we are constantly obliged to make use of the terms primary and secondary symptom, to speak of the local and constitutional varieties of the disease, and to say such and such symptoms belong to one form, such to another; thus, it becomes necessary to explain, as we go on, to the student, what such and such things are. This mode of treating the subject certainly leads the lecturer occasionally into digressions of considerable length; but as long as the general tenor of the lecture is kept in view I do not think this of any great consequence, whilst to the student it is positively beneficial. I may repeat here a remark which I have frequently had to make in this place—viz., that the great object of a lecturer, on any branch of medical science, is *to teach*. It would be easy to compose eloquent discourses, but this I do not

consider is the true and legitimate duty of the medical lecturer; he has to teach a profession to persons who are afterwards to practise it; and it rests with him to make as simple as he can a subject beset with technicalities, and to convey his information in words simple and intelligible.

By the terms venereal or syphilitic diseases I understand all diseases which are the result of impure cohabitation, whether such diseases are purely specific in their character or not. Many of these forms are capable of being propagated like small-pox, by inoculation, under the same form; hence, such are termed specific; this is syphilis, properly so called. This, however, perhaps, is the least frequent of those forms of disease which result from impure connection. Hence, authors at the present day have very properly divided primary syphilitic diseases into two grand classes, differing from one another in their origin, cause, termination, consequences, and mode of treatment. These divisions, which exist in nature, are into primary diseases, marked by and attended with discharges, and primary diseases marked and characterised by ulceration. The first have been termed non-virulent affections, from their nature and consequences, being, for the first part, simple in their character, and not being capable of poisoning the constitution, and producing the secondary and tertiary diseases which are consequent upon diseases of the second class. The second class have been termed "virulent affections," from their possessing the properties to which I have just alluded—*i. e.*, they have a natural tendency to poison the constitution, and produces diseases of a secondary character in other parts, as the eye, the mucous membranes, the skin, the bones, and the glands. Some authors have termed the first "syphilitic diseases," and the second "syphilitic diseases." Dr. Wallace has called the former "catarrhal primary syphilis." Such, then, is the general division of diseases which are the result of impure cohabitation.

I shall direct your attention exclusively in this lecture to the first class of diseases—viz, the non-virulent, the syphilitic, or catarrhal; and here again we shall have to make one or two subdivisions. The second class of diseases have been till lately, and in this country more particularly, classed under the one generic appellation of gonorrhœa. Swediaur, a French writer, in 1820, made use of the words *blennorrhagia* and *blennorrhœa* to designate these forms of disease.

The gonorrhœal and blennorrhagic affections in the male are of two kinds, affecting the mucous membrane of the urethra (common gonorrhœa), and that of the outer surface of the glans penis, or under surface of the prepuce (termed, in the first instance, *balanitis*; in the latter, *posthitis*); or, when combined as they generally are, *balano-posthitis*; called also external bastard, or false gonorrhœa, and commonly in this

country "chancreous excoriation," a disease, as we shall presently see, very important in its nature and consequences. We shall arrange our remarks upon this class of diseases under the heads of causes, symptoms, termination, consequences, complications, and mode of treatment.

First, then, for balanitis and balanoposthitis—external or false gonorrhœa, or chancreous excoriation, inflammation with muco-purulent discharge affecting the external surface of the glans penis and under surface of the prepuce, and very rarely occurring except after a suspicious connection. It may occur, and I have seen it occur, in married life where I can vouch for the honesty of both parties; but, Gentlemen, I can assure you it is a very rare occurrence. The causes of external gonorrhœa are to be sought for in the natural conformation of the male organ on the part of the male, and various morbid conditions of the mucous membrane of the vagina on the part of the female, and very commonly both must be in existence to produce in the party an external gonorrhœa or balanitis—a disease constantly presented to your inspection, and as constantly misunderstood. A natural phymosis predisposes the patient to contract this form of disease; for instance, a person having this natural phymosis, unable to denude the glans penis, cohabits with a female having various morbid discharges from the vagina; the discharge gets under the prepuce, and is there retained, as the patient cannot withdraw it to wash the part, and the discharge excites inflammation of a more or less active character, which would all have been avoided if the glans could have been retracted and the part washed with a little soap and water. The secretion of the glandulæ odoriferæ, as they are termed, also of itself commonly produces a form of balanitis without even exposure to impure connection. This secretion, which in some persons is extremely abundant and offensive, is retained by the elongated and not to be retracted prepuce constantly on the base and surface of the glans, which irritates and inflames the parts, and ultimately produces thickening and adhesion between the prepuce and glans.

My colleague, Mr. Knowles, a few days since, operated upon a case of this kind in the Queen's Hospital, where adhesions had taken place solely from this cause, and the prepuce was thickened and indurated to a very considerable extent, so much so that it offered great resistance to the scalpel. He was a middle-aged man, and his two children were affected with the same natural conformation. I have operated upon a number of cases in private practice for the relief of this natural phymosis, which, both in the married and single, predisposes the subject of it to a host of very serious inconveniences.

The chief causes of balanitis are to be sought for in the condition of the female vagina. "In examining the vulva, vagina, or neck of the uterus, in females laboring under discharges which have produced balanitis or gonorrhœa in the male, we have observed the mucous membrane covered with papulæ or follicles, more or less developed, constituting a papular vaginitis or utero-vaginitis, sometimes assuming the form of small spots, in size not larger than a pin's head, isolated, or more or less confluent. On the same portion of the mucous membrane we have distinctly seen

patches more or less numerous, and varying in extent, which have a striking analogy with the suppurating surfaces of the skin on which a blister has been applied.

Again, in some forms of blenorhagia in the female, we find the mucous membrane of the vagina of an uniformly red color. At other times the redness occurs in isolated patches, with swelling, heat, and pain, unattended by any secretion. Other cases of this kind give rise to a morbid secretion, the color and consistence of which are variable. The differences in the character of the secretions appear to have no reference to the causes which have produced them. The discharges from the urethra, vulva, vagina, and uterus are very various; but the difference has not appeared connected with any one particular lesion more than another. The acute stage generally, whatever may be the particular lesion, causes at its commencement a secretion almost wholly serous, or only consisting of mucus more abundant than usual, which afterwards becomes opaque, purulent, or of a darkish yellow color, sometimes green, sometimes mixed with blood. The chronic stage often gives rise to a milky secretion of a thickish consistence, similar to that of cheese, or simply to a mucous flux.

The chronic discharges also may put on a rusty appearance, and become tinged with larger or smaller quantities of blood. These secretions, whether in the acute or chronic stage, may have no smell, or, on the contrary, may have a very unpleasant odor, particularly where the mucous papulæ exist. The smell is often so decided that it is characteristic in a great number of cases. The only differences which result from the particular sort of the blenorhagia are, that the secretions which come from the uterus are always more mucous, thready, and collected into flocculi—whereas those which escape from the urethra, vulva, or vagina, present a less tenacious character than the others."*

These forms of vaginitis, or blenorhagia, sometimes occur in patients of the highest respectability, and are capable of producing balanitis in the male. But I never saw an instance where in respectable married life such diseases have produced gonorrhœa. I have seen one or two instances where an inflamed and irritable condition of the vagina in the female, during the latter months of pregnancy, has produced balanitis in the husband, and where a great deal of family distress has been occasioned by the circumstance.

The forms of disease on the part of the female I have just enumerated will produce external gonorrhœa, and also gonorrhœa properly so called. I would here remark, however, that I never saw the blenorhagia in respectable life produce gonorrhœa in the husband, though, under the terms of fluor albus and leucorrhœa, it is a disease of pretty frequent occurrence in all ranks of society. Both the contagious blenorhagia of which I have spoken, and ordinary leucorrhœa require the same pathology—i.e., a vaginitis assuming various forms, accompanied by discharges also of varied character; yet in the one instance, that of the impure female, we see gonorrhœa in both its forms, external and internal, constantly produced; whilst in the other, that of the respectable married female, cohabitation takes almost with im-

* Acton on Venereal Diseases, pp. 172, 173.

punity, as far as contracting disease is concerned. Hence it has been attempted to establish a differential diagnosis between the two, in which all have equally failed. Hunter, Clarke, and Churchill have failed in doing so, and since the speculum has been so much employed no additional light on the subject has as yet been given.

We must decide in these instances by the effects produced by the facts before us, and not on the grounds of any *a priori* reasoning. When we see that blenorrrhagia or the various forms of vaginitis with muco-purulent discharge in the married female, on the one hand, exists for a longer or shorter period, for months, or even years, without producing the slightest affection on the part of the husband, or on that of any child which may happen to be born during the continuance of the disease,—and observe, on the other hand, forms of vaginitis precisely similar to those which I have mentioned in the impure female, producing balanitis, gonorrhœa, and all their attendant consequences, we must be disposed to admit something specific in the latter case, some form of morbid poison which does not exist in the first.

“Between the muco-pus of a pure gonorrhœa and the pus or the muco-pus of other discharges, there is a difference precisely similar to that which exists between the pus of a chancre producing a characteristic pustule by inoculation, and the pus of other the result of sexual intercourse, which does not give this result, although no chemical or physical circumstances are capable of showing in what this difference consists.”*

Of the Contagious Principle of Blenorrrhagia and its Effects.

The symptoms of balanitis are heat, itching, and redness of the glans penis and the inner surface of the prepuce, the redness being disseminated in patches as though the surface of the part had been slightly scalded with drops of hot water sprinkled over it. These symptoms are accompanied by a muco-purulent discharge from the preputial opening, and if the glans can be denuded, its whole surface and that of the prepuce are covered with an adhesive flaky matter looking like curd. This is the condition if the glans can be denuded; if it cannot, all we generally observe is a muco-purulent discharge from the preputial opening, though not from the urethra, with heat and swelling of the end of the penis. In fact, the balanitis itself is the most common cause of our not being able to denude the glans penis; the inflammation produces the phymosis, which was not present till the balanitis was contracted. Again, the phymosis may be congenital.

Discharges from the end of the preputial opening, however, with a natural or acquired phymosis, are not all dependant upon balanitis as I have described it. They may result, and commonly do result, from a chancre or ulcer, situated either on the glans or prepuce, and producing the inflammation with the discharge from the preputial orifice. If an ulcer of any standing be the cause of the mischief, we can generally detect it from a partial induration felt at the same part of the prepuce under the skin, and a peculiar soreness and tenderness existing in this part when the penis is pressed or rolled between the fingers. These

would be the distinctive symptoms to guide us in a differential diagnosis between phymosis with chancre and phymosis the result of pure balanitis, since both diseases would be characterised by the same or pretty nearly the same general symptoms—viz, swelling and heat of the end of the penis with phymosis and discharge from the preputial opening. A balanitis might again exist with a pure gonorrhœa; this is very common, but in this instance the discharge from the urethra can be seen. I mention these complications of balanitis, because their existence with balanitis would materially modify the treatment. They would when existing become the epiphenomena of the disease—i. e., its most important features, requiring principally the special direction of the therapeutic agent.

Treatment of Balanitis—Simple Uncomplicated Balanitis.

I have told you that balanitis consists in inflammation, with discharge of foetid muco-pus from the surfaces of the glans penis and prepuce, being most commonly complicated with a natural or acquired phymosis, the result of a suspicious connection. I qualify the detail of symptoms with the last expression, “the result of a suspicious connection.” When a patient thus affected is presented to your notice, purge him well in the first instance, not with any special view of relieving the disease, for it will have no effect upon it, but with a view of keeping down any symptomatic fever which may be set up in the system. Keep the patient quiet if you can. If he can lie in bed, put him on a bread and water poulitice; if he cannot, wrap the penis in liq. plumbi. dilut., with a piece of oiled silk over it, and let him wear the apron suspender—for two reasons, one that it keeps the parts from hanging down, and the second that it keeps your patient’s linen clean, which is of very great importance. These are general measures, and perhaps without any other, might in a few days cure your patient. Bear in mind that you are to treat him on general principles, and that, although his disease has been contracted from a suspicious female, it does not require mercury for its cure. If you give your patient mercury, you will make a disease; but, depend upon it, you will not cure the one for which you have been consulted. The local treatment is also important; mild astringent injections between the glans and prepuce night and morning, composed of ten grains of the alumen exsiccatum to the pint of water, or the same quantity of sulphate of zinc. I use a syringe for this purpose that will keep up a continued stream of fluid. After this you may introduce between the glans and prepuce, by means of a camel-hair pencil, a liniment composed of calomel, opium, and honey.

Simple cerate or honey, and olive oil, of each one ounce;

Calomel, half a drachm;

Opium, one drachm. Make a liniment.

I have seen this liniment, when phymosis was not present in many instances, cure the form of disease I have mentioned in a day or two, without any other remedy having been used.

When the disease is from the first uncomplicated with phymosis, the solid nitrate of silver may be passed once or twice slightly over the inflamed surface, which is then to be smeared with the calomel and opium pomade. At other times the surface

* Baume’s “*Precis sur les Maladies Veneriennes*,” vol. i., p. 208.

may be sprinkled with an astringent powder, a small piece of soft lint introduced between the glans and prepuce, and the latter then brought forwards. This powder should consist of one ounce of plumbi carbonatis, one ounce of pulvis Cinchonæ, and from ten grains to one scruple of pure tannin. I have myself, however, been so satisfied with the results of the application of the calomel and opium cerate or pomade, that I have almost ceased to use any other remedy.

Of the Operation for Phymosis in Balanitis.

I have already told you that balanitis is in many, if not in most, instances complicated with phymosis, and the question naturally arises whether this is to be relieved by an operation or not. You must remember I am speaking of pure uncomplicated balanitis, and not of this disease in connection with chancre or urethral gonorrhœa. If the phymosis be a congenital one, and the patient have contracted a balanitis, in most instances the operation should be performed, as the continuances of the phymosis predisposes the patient to a number of those inconveniences mentioned before—adhesions between the glans and prepuce, and thickening of the latter from chronic inflammation.

If the phymosis be an acquired one, produced by the disease, do not operate. Poultices, cold lotions, purgatives, and, above all, the calomel and opium pomade, introduced in the way I have told you, will, in a few days, in almost every case, enable you to retract the prepuce. An operation in the latter case is unwarrantable, whilst in the former it is not only justifiable, but highly advantageous. We shall have more to say of the operation of phymosis when speaking of primary venereal sores complicated with it; but in cases of uncomplicated balanitis the rules I have given you are safe, and have been proved by myself time after time in practice. Balanitis may, if neglected or badly treated, continue for an indefinite period of time—may run on into conditions of superficial ulceration—may produce adhesions of the prepuce to the glans, either partial or total, thickening of the prepuce, and, according to Roux, cancer of the penis. The last I have never seen. Again, it commonly produces enlargement of the glans in the groin, and occasionally bubo. I have seen the latter in one or two instances.

I have never seen secondary symptoms succeed to simple balanitis, though some modern authors have recorded examples of the fact.* I should recommend you, in cases of balanitis, to give a guarded opinion with regard to this, particularly where the disease is accompanied by breach of surface. Some cases have been brought forward in which constitutional symptoms, characterised by copper colored patches and papulæ, succeeded to balanitis or dis-

* Since writing the above I have seen such an occurrence. If balanitis or chancreous excoriation is suffered to continue for an indefinite period of time, a thickening of the diseased surface always occurs, and a chronic suppuration is established from the abrasion covering the thickened part. In this state of things secondary symptoms will occur in the male, and may be produced in the female, when cohabitation is permitted under such circumstances. I have seen eruptions accompanied by a node on the forehead, loss of the hair, and other symptoms of constitutional syphilis, produced in the wife, where this species of abrasion with thickening were the only symptoms in the husband.

charge from the external surface of the glans and from the prepuce without ulceration or breach of surface. In the cases mentioned, this external gonorrhœa was followed by the falling off of the hair, and eruptions precisely similar to those which follow primary venereal sores, and these complaints were curable only by mercury. In the first case the patient had never before had any venereal affection till he contracted a balanitis characterised by redness, heat, and itching, of the external surface of the prepuce, to which succeeded a purulent discharge.

"This form of disease is considered by many modern writers as a variety of gonorrhœa, differing from the urethral variety merely in its seat. In the cases already alluded to this external gonorrhœa or balanitis was followed by falling off of the hair and eruptions, precisely similar to those which follow venereal sores, and were curable only by mercury. In the first case the patient had never before had any venereal affection till he contracted a balanitis characterised by redness, heat, and itching, of the external surface of the glans penis and neighbouring portion of the prepuce, to which succeeded a purulent discharge, *without any kind of excoriation or wound*. This was succeeded in the fourth case by copper colored patches on the forehead and chest, and a female with whom this patient cohabited became affected with heat and swelling of the genitals, pain in making water, and two months after an eruption on the inside of the thighs, the nose, and the forehead. The female was declared diseased; put on the use of mercury, with sarsaparilla, and recovered. The first patient (the male) took to himself a second mistress, still suffering from the affection (balanitis), which he did not consider syphilitic, the first mistress having married after recovery. This second mistress soon became affected with the same symptoms as the first, and two or three months after a constitutional affection made its appearance, which ultimately assumed a pustular form. The prospect of an advantageous marriage presented itself, and our patient now separated from his second mistress and married. In a short time the wife was affected as her temporary substitutes had been before, and subsequently with eruptions of a like character. The patient and his wife now put themselves under medical care; and the surgeon stated that the only disease in the genitals with which the husband was affected was redness of the glans penis, with purulent discharge; no ulceration, breach of surface, or trace of cicatrix. The patients were put upon mercurial treatment and both perfectly recovered. These primary forms of disease in the glans and prepuce, marked or characterised by discharges, without ulceration, have of late been supposed to be precisely identical in their character with gonorrhœa, differing from it only in their seat. We are inclined, from observation, however, to believe, in many instances this analogy is not correct, though it may hold good in some, since what appears a mere catarrhal affection in the first instance frequently degenerates into ulceration more or less extensive. Many modern surgeons of experience in the matter we are now considering state that simple balanitis may produce a chancre, and thus induce secondary symptoms."

A very marked example of this has occurred in the

patient Plaistow, now in the Queen's Hospital; he was admitted for simple balanitis. On examining him yesterday I was surprised to see a crop of small ulcers in the top of the prepuce, which I cauterised in the presence of some now present. I have in private practice, not only in one but in several instances, seen a superficial sore appear before a patient was well of the balanitis, and this sore followed by bubo; in these instances a fresh infection was impossible. The distinctions are perhaps not very clearly defined between a pure catarrhal inflammation of the glans and prepuce, and those very mild forms of syphilis which some writers have termed superficial. Dr. Wallace has recorded a case bearing upon this point, which in a practical point of view is so instructive, that I shall introduce it to your notice. "A lady was brought to Dublin on account of an eruption, and a state of general ill health. She had been some months married and was pregnant. The eruption did not appear of a doubtful character. It was a syphilitic eruption of a rubeoloid form, and was accompanied by its almost constant attendants, a superficial disease of the fauces and a condylomatous state of the pudenda and of the orifice of the anus. There were, also, small condylomata in the axillæ. I communicated my opinion to the husband of the lady, who had accompanied her to town; and he denied that he had ever had any venereal disease; but he, at the same time, admitted that, some months before his marriage, he had got, in consequence of a suspicious intercourse, what he called a chafing; that he had consulted Mr. M., who directed for him a wash by which the disease was removed; that he had been assured by this gentleman that the complaint was not venereal, and did not require mercury; and that he had taken the precaution of submitting himself to examination before marriage, with the view of making his mind sure that he had no venereal taint; but, on examining him, I found a very slight oozing at the corona, with a very slight thickening of the corresponding portion of the lining of the prepuce; and there existed on some parts of his body slight cutaneous desquamations of a suspicious character."—Wallace, pp, 229, 230.

The lady miscarried of a dead child, and the husband and wife were placed under mercurial treatment and recovered.

OBSERVATIONS

ON THE

CANNABIS INDICA, OR INDIAN HEMP.

By W. LEY, Esq.

[Read before the Royal Medico-Botanical Society.]

The hemp plant, *Cannabis Sativa*, is well known; it is supposed to be a native of Persia; it grows wild on the mountains of Asia, but is not confined to them. When cultivated for its fibre it is sown so closely that it spends itself in long shoots. When a single plant is grown it shoots out its branches close to the soil luxuriantly, and attains a height of four, five, or six feet. The leaf resembles that of the common nettle. It exhales a powerful narcotic odor, and the branches are glutinous to the touch, with a resinous secretion. For medicinal purposes the garden hemp is used. In the East the plants are directed to be set at least nine

feet apart, to allow them the full benefit of heat, light, and air. When the seed is formed, the plant is in the greatest perfection. The resinous exudation of the leaves is then collected and sold as churrus; or the shoots, from which the resin has *not* been collected, are cut and dried, and sold as gunjah.

In England it has been used medicinally, but its use is quite forgotten. In an old act of Henry the Eighth, which is still in force, hemp is forbidden to be soaked in ponds or running streams where cattle drink. The seeds are mentioned by old medical writers. By modern writers it is treated as having no effect; yet botanists speak of it as a violent poison, and of the water, in which it has been soaked, producing its effects almost as soon as drank. Herodotus, speaking of the customs of the Scythians, says they have among them a species of hemp, resembling flax, except that it is both larger and thicker; of this the Thracians make themselves garments. The Scythians take the seed of this hemp and throw it upon red hot stones; immediately a perfumed vapor ascends stronger than from any Grecian stove. This is to them in the place of a bath, and it excites from them cries of exultation. Hemp seeds are also mentioned by Galen as promoters of hilarity and enjoyment. These properties are forgotten among us, if they really exist; yet throughout the East the resin of the plant maintains a very high credit. It is of the resin that this paper treats.

It is noticed by many Arabian, Persian, and Sanscrit writers, and is in popular use as an intoxicating agent from the furthest confines of India to Algiers. When the dry leaves are mixed with tobacco, and smoked, "intoxication ensues almost instantly, with heaviness, laziness, and agreeable reveries; but the person can be readily roused, and is able to discharge routine occupations." If the resin be swallowed, almost invariably the inebriation is of the most cheerful kind, causing the person to sing and dance, to eat food with great relish, and to seek aphrodisiac enjoyment. The intoxication lasts about three hours, when sleep supervenes. No nausea or sickness of the stomach succeeds, nor are the bowels at all affected; next day there is slight giddiness and much vascularity of the eyes, but no other symptom worth recording." These effects are produced on carnivorous animals generally; but on graminivorous they are less marked. In the colder climate of this country the effects are much modified. I fear, too, that a vegetable production sent to this country from Calcutta, and not immediately used, has been deteriorated by age. The stimulating effect has been very much less marked; the few persons who have felt the dreamy exhilaration have made no outward manifestation of it. The dose to produce stupor must be much larger. The appearance of catalepsy, which was occasionally produced in India, has not been produced here. The subsequent effects are depression of spirits and relaxation of the muscles in a remarkable degree; yet the lowness attending that relaxation, the free perspiration on the skin, and the increase of appetite, have made some old rheumatic persons speak of it as of the elasticity of youth. Most frequently the depressing effects cause a great disinclination in the patient to continue its use. The remedy was intro-

duced to our notice by Dr. O'Shaughnessy in a paper originally published at Calcutta, but which has been this month reprinted in the Provincial Medical Journal. The results which followed his investigations are most practical and beneficial. How perfectly they will be confirmed by experience in this country is yet to be proved. I have been requested to make this communication to the Royal Medico-Botanical Society, because I have witnessed some of its effects, and can myself testify that this agent is one of unusual value. In this my experience differs from that of a gentleman who has published an account of his want of success in the use of this agent. Yet he has had much greater opportunity, and has had more varied articles in the mode and time of their preparation than I have had. His high character makes it the more necessary that I should state as precisely as possible what effects I have seen. There can be no doubt that some of these effects can be produced more conveniently and more effectually by other remedies. Its peculiarities will be best shown by comparison with opium, that being the only remedy of the class that is used to produce its various effects. Opium is stimulating to intoxication; has great reputation in the East as an aphrodisiac; it raises the pulse, and quickens respiration, increases the heat of the body, and diminishes secretion; it allays irritability and pain of the whole or any part of the body, but not invariably. Secondly, it causes general depression, sleep, thirst, headache, dryness of skin, constipation, loss of appetite, sickness, tremors, and other symptoms of debility.

The hemp resin has no taste, and little smell. In the East it is stimulating to intoxication, and to aphrodisia; it raises the pulse, excites warmth, makes the breathing more slow, does *not* check secretion; it allays irritation and pain, but less generally than opium; it causes general depression, sleep, relaxation of the muscles in a remarkable degree. The patient lies in one position, indisposed to move; the face loses its expression, the jaw falls, there is difficulty of breathing; it is as though the air was drawn through cotton, it feels dry; the expectoration and perspiration are increased; the bowels are not affected except there may be an unpleasant feeling of heat—a forcing of the sphincter ani, as if it could not retain the contents of the rectum; yet with evacuation—which is in such case particularly easy—or no evacuation, the forcing continues. These symptoms will continue while the muscular relaxation lasts. Sleep, or rather repose, would continue during the whole time unless the avocations of the day or mental activity forbid it; no unpleasant feelings succeed, and the appetite improves.

Opium is *useful* to increase the heat of the surfaces, to restrain over-secretion, to diminish pain and irritation; but it is in spasmodic and convulsive diseases that opium is most evidently useful. In tetanus it has occasionally succeeded when given in very large doses. In hydrophobia 180 grains have been given in the space of twelve hours *without* apparent effect.

The amount of benefit we may derive from the hemp, when experience has more fully proved its efficacy, is yet to be seen. In cholera it has allayed sickness, cramp, and purging, it produced rapidly an improved condition of skin in warmth and perspiration; it raised the pulse. In rheumatism it relieved

the pain and swelling more quickly and satisfactorily than I have seen by any other medicine. In spasmodic and convulsive diseases hemp is most eminently useful. In tetanus it has been the means of cure in the majority of cases, both in men and in horses. It has relieved hydrophobia of much of its horror, but did not avert the fatal termination. In common with opium it is useful in chorea, spasmodic asthma, delirium tremens; and I believe that whenever opium is useful hemp also will show that it has some power. Time must draw a more perfect comparison.

In dangerous doses the effects of opium are—increasing stupor, loss of motion, and of sensibility, respiration slow, muscles relaxed, pupils contracted. The progress of the poison is marked by the increasing relaxation of the muscles, and the falling of the features from that cause, until the depression of death arrests progress. In dangerous doses the effects of hemp are not known, because the largest doses have not proved dangerous; in this is its great superiority over opium. When opium begins to kill, hemp exerts a beneficial influence. The stupor, loss of motion and sensibility, slow respiration, relaxed muscle, fallen feature, when produced by hemp are not the prognostications of death; by their agency we promote cure. The falling jaw and relaxed features, so fatal as the effect of opium, may be in hemp the result of a moderate dose; it is by sustaining these relaxing doses that an absorbent effect is attained. By this influence we relieve muscular spasm with greater mildness and more certainty; under it we produce absorption from bursæ, from the sheaths of tendons, and from the joints. It is no slight thing to say of a new remedy that it will in any degree bear comparison with opium. It is a triumph in therapeutics to establish, as I do not doubt we shall be able, that this new remedy will effect by moderate doses, and safely, what our heretofore strongest power could only attempt with danger—that, going further, this acquisition will prove itself a direct antidote—the first of its class—to strychnine, one of the most violent poisons nature affords. This language may be strong; but, being founded on evidence, is not too strong, until it is contradicted by further investigation. To promote that, Dr. O'Shaughnessy has brought with him to this country a considerable quantity of the dried plant. He has placed it in the hands of Mr. Squire, to be by him prepared; it will there be within the reach of all, and allowance being made for the age and voyage, his name is an assurance that the preparation he makes will be as good as any pharmacist in this country could supply. The question of the effects of the plant grown in this country is still to be tried; the experiments hitherto made are inconclusive. In any experiment that may be made it must be borne in mind that the water in which hemp is steeped has the credit of being a poison in this country, and in India also.

The introduction of the plant into use as an intoxicating agent, in the East, would appear to contradict this opinion. The fresh leaves were eaten; and subsequently a beverage having the emerald green color of the leaf was a favorite mode of imbibing its virtues. The tale is thus told—"Haider, the chief of ascetics and self-chasteners, lived in rigid privation on a mountain between Nishabor and Ramah, where he esta-

blished a monastery of fakirs. Ten years he had spent in this retreat without leaving it for a moment, till one burning summer's day, when he departed alone to the fields. On his return an air of joy and gaiety was imprinted on his countenance; he received the visits of his brethren, and encouraged their conversation. On being questioned, he stated that, struck by the aspect of a plant which danced in the heat as if with joy, while all the rest of the vegetable creation was torpid, he had gathered and eaten of its leaves. He led his companions to the spot; all ate and all were similarly excited." The exaltation was so great that the beholders attributed it to supernatural inspiration. We cannot read this account without recurring with a smile to the famous oracle at Delphi.

This class of effects cannot be passed over, being less marked here than in the East; the treating of them is a matter of greater difficulty; yet their absence even would require notice. The drug is there known as "the laughter moving," "the exciter of mirth," "the strengthener," "the promoter of success," "the causer of a reeling gait," "the exciter of sexual desire." There are few men in our country who are unacquainted with an agent as effectual, and as much admired by the sons of song. The praises bestowed on Haidee's emerald cup and on the mountain dew of our Emerald Isle are too identical to be unobserved. They are both used in medicine, and both are known to their votaries as a most approved cordial. There is a question fairly raised—Was not this the nepenthe of which Homer sung? Mr. Lane supports this view by observing that Helen evidently brought the nepenthe from Egypt, and hemp, under the name of benj, is there still reputed to possess all the wonderful qualities Homer attributes to it. There can be few of these popular fictions in which there is no substratum of truth. With this feeling the curious testimony of the effects of the hemp vapor, and the litherness of limb produced by the internal use of the remedy, become closely allied to the fable of Medea boiling old men young. There is yet another historical allusion which the interest attached to everything emanating from our own great poet and dramatist makes it impossible to pass. In the "Arabian Nights' Entertainments" frequent mention is made of the drug, the subject of this communication, under the name of benj. In one tale, the heroine, Koot-el-Kuloob, is represented to be thrown into a profound sleep by the medicine given her, and buried alive; on being dug up again, the fresh air revives her; she is still under the influence of the dose, but the only manifest effects of it are her strong appetite for love and food. This tale was published in Egypt about the year 1450 or 1500. The story of Romeo and Juliet was published at Venice in 1549, as an occurrence of real life at Verona. We have the authority of Lord Byron for the faith still placed in the truth of this story by the inhabitants of that part of Italy. He visited the tomb of the lovers, and mentions the ruins of the castle of the Montecchi, and a chapel once belonging to the Capelli; he also adds to the tale the information that Romeo is supposed by tradition to be of Vicenza. These are curious points rather than satisfactory evidence that the account of the sleeping draught was possible. It is on the possibility of any draught of such potency

being without danger to life that the probability of the story principally depends. The possibility, then, is the question. That Dale, one of our earliest writers on materia medica, should speak of bangu thus—"Infatuat ut opium, somnum consiliat, multe autem affirmant ad libidinem ciendum, et venerem stimulantum, magnæ esse efficaciæ; verum enimvero nostrâ sententiâ perniciosus est planta, et none sine periculo sumenda." This is testimony that the popular drug of Egypt was well known in England, and therefore by necessity to the literati of Venice at an earlier period. It would as yet be very bold to say that the benj has the efficacy described. The coincidence is curious, and I can fearlessly say that, of all known soporifics, I should push this to an extremity with most confidence. Having given it for the relief of tetanic spasm, my patient felt that she had taken too much; she was overpowered; the spasms were relieved, and she fell into a stupor which lasted ten hours. The face was relaxed, the eye closed, the jaw fallen, the breathing scarcely perceptible. She showed no sensibility; there was no motion; she was in the calmest sleep; her skin was warm, and the pulse maintained its strength. These assured me that it was not the sleep of death. She awoke without any disagreeable feeling from the powerful dose, but with relief beyond expression. Had this influence been produced in a climate where coldness is not an accompaniment of death, and where the funeral takes place before the body has time to cool, a premature burial might have been in prospect. Dr. O'Shaughnessy will tell you that a Persian physician of high character, seeing him doubtful and alarmed at the stupor produced by one grain, bade him give thirty without fear, adding, "You will think him dead, but it is of no consequence; he will recover again"—evidently likening the effect to that of spirit rather than of opium. Mr. O'Brien, who has been familiar with the remedy at Calcutta, has also seen a person whom he believed dead, but recovered after twelve hours' stupor, without any unpleasant effects remaining. Admiration of the poet has made me strenuous, perhaps beyond prudence; but the truth, and strong insight into nature which he always displays, make the defence of what has been deemed impossible a flattering subject, and as such I have not feared to be free with my pen.*

I have brought forward this subject in the presence of Dr. O'Shaughnessy (to whom we are indebted for the introduction of this medicine), because his engagements prevent his doing so, and because the loss of his assistance is what we should all deplore. He has seen more of its effects than I, and the watchful eye of the father detects points of interest in the child, which warm his eloquence, and will make him protect the offspring of his energy and the evidence of his diligent research.

* Although experiments on dogs are not conclusive as to the effects of remedies on the human subject, they afford evidence that is not to be disregarded. On the human adult, one-sixth of a grain of the fresh extract of hemp prepared at Calcutta produced decided effects. Dr. O'Shaughnessy gave to a moderate sized dog half an ounce of the same preparation; the result was that he slept, in a state of stupor, with the limbs stiff, as from catalepsy, for two days. It then recovered and ate voraciously.

REMARKS
ON THE
PATHOGENIC ACTION
OF THE
IODURET OF POTASSIUM.
By M. RICORD,
Surgeon to the Female Venereal Hospital, Paris.

The extraordinary results obtained by the use of the ioduret of potassium in the treatment of syphilis, and the general employment of this remedy by the great proportion of physicians who attend specially to venereal diseases, have induced me to point out some of those effects produced by it, which may become causes of error in the course of the treatment, or constitute real complications, which may modify or arrest the cure.

I have already made known the circumstances in which the ioduret of potassium ought to be employed—that is to say, at what period of the syphilitic disease it is most likely to be serviceable, and of which it is in a sort the specific. I have also stated the doses and pharmaceutical preparations to which the preference should be given. In order to complete the history of this powerful therapeutic agent, I am now about to speak of its pathogenic action. In the first place, let me say that the ioduret of potassium has a very marked action on the secretions in general, which it excites and increases greatly. Its effects on the skin, mucous membranes, and kidneys, are very remarkable; the circulation and the blood itself are sometimes influenced by it, as also the nervous and the muscular systems; but there exists in the production of these phenomena a certain order of frequency, in accordance with which we shall now study them. At the same time, I must observe that, although what I am about to advance is drawn from a great number of observations, I yet give it with a certain degree of reserve, expecting from time, and the experience of other practitioners, either the confirmation of my remarks, or, on the other hand, advantageous modifications thereof.

Action on the Skin.—The skin is incontestably one of the tissues the most easily influenced by the ioduret of potassium. Nothing is more common, in fact, than to see patients under its influence affected with different eruptions, and more especially with eruptions of the psudracious form, somewhat resembling the pustules of acne, with this difference, that they are not confined to the parts habitually affected with acne; thus they are found not only on the face and shoulders, but on every part of the body, without exception.

There is scarcely any form of acute eruption of the skin which the ioduret of potassium cannot induce, according to the predisposition of the patient. In the one case we may have an eczema, in the other herpes, while in others it may cause simple erythema. I have recently had under my care at the hospital two patients, in whom, at two different periods, there appeared an eruption of papulous erythema on some parts, of erythema nodosum on others, and, in a patient affected with cancer of the face, to whom the ioduret of potassium was given in rather large doses, it on several occasions caused an eruption of impetigo on the hairy scalp, and of a rupia, offering the cha-

acters of a cachectic rupia, on the legs and forearms—symptoms which disappeared as soon as the remedy was omitted, and showed themselves again when its use was resumed. I have seen the ioduret of potassium several times give rise to a genuine purpura hæmorrhagica. I have seen it produce on three several occasions, after a fortnight's use, a genuine spotted disease on the legs of a gentleman, for whom I prescribed it; and in the case of a lady, for whom, with the sanction of Professor Cruveilhier, I ordered it, for the removal of very serious tertiary symptoms of syphilis, it caused, towards the termination of the cure, a petechial eruption on the lower limbs, unattended, however, with danger. Some patients have experienced only a feeling of heat and pricking of the skin, attended at times with more or less pruritus. The importance of knowing these different effects of the ioduret of potassium on the skin will be readily acknowledged, in order that they may not be confounded with the symptoms for the removal of which the remedy is given, and especially in order that it may be abandoned at once in those who have analogous diseases, or such predisposition that the ioduret of potassium may either exasperate or develop these affections.

Action on the Digestive Functions.—I have ascertained, and the greater number of those who have experimented with the ioduret of potassium agree with me on this point, that the functions of the digestive apparatus are increased in activity, and are better performed; the individuals get an appetite, and *embonpoint* is an ordinary consequence of its use.

Nevertheless, there are circumstances in which this medicine may produce injurious effects on the digestive canal. One of the most remarkable and most constant is a pain situated in the great cul-de-sac of the stomach, and which, by the manner in which the patients complain of it, might be mistaken at first for pleurodynia of the left hypochondrium. This pain may be sometimes very severe, without there being any increase of thirst, disorder of the appetite, coating of the tongue, or any reaction of the circulation. Pressure does not increase the pain; the function of digestion has not any influence on it; it seems to be due entirely to a gastralgia. In some persons the appetite, which at first is increased solely to a satisfactory condition, becomes excessive, exaggerated, and absolutely morbid. We have had patients in the hospital that double rations did not satisfy. In a few cases the use of the ioduret of potassium is followed by phlegmasia either of the stomach alone, or of the entire intestinal canal, attended with vomiting and diarrhœa, and, in fact, all the phenomena of poisoning. Nevertheless, the most frequent result of the action of this agent on the intestinal mucous membrane is the production of a sero-mucous flux, and we shall find that it has an analogous effect on the other mucous membranes.

Ptyalism.—While speaking of the pathogenic action of the ioduret of potassium on the alimentary canal, I must mention a phenomenon I have often met with—I mean a peculiar salivation caused by this medicine. In many persons it causes a real ptyalism, which may be as great and as severe as the most marked mercurial ptyalism. It is important to be aware of this peculiar phenomenon, in order that it may not be

confounded with an analogous one caused by mercury, especially in those cases where the two remedies are administered conjointly. It will be sufficient to point out the characters proper to the pytalism from iodine, without mentioning those caused by mercury, in order that they may be distinguished from each other.

The salivation to which the ioduret of potassium gives rise very much resembles that of pregnant women. In these cases the saliva has very little viscosity; it seems to come not only from the cavity of the mouth, but to be also the product of a kind of regurgitation. The mucous membrane of the mouth may be rather irritated, and œdematous, but there are not any signs of inflammation, as in mercurial stomatitis, nor is there observed any tendency to the ulceration peculiar to the latter. In the majority of cases even it is impossible to discover any appreciable alteration of tissue. The salivary glands are not the seat of any tumefaction, nor is there any peculiar odor from the breath. The patients complain that the saliva has a saltish taste, resembling that of the ioduret of potassium.

Action on the Kidneys.—The secretion of urine is often increased by the ioduret of potassium, the augmentation under certain circumstances constituting a true pathological condition; I have had a patient in the venereal hospital affected with diuresis from the use of this remedy. Each time it was administered, the emission of urine was materially increased; the patient has passed from forty to fifty quarts in the course of the twenty-four hours, drinking in the same proportion. Each time that the ioduret of potassium was suspended, this accidental supersecretion ceased, but it was reproduced as soon as its use was resumed. In this case, as in those where the urinary secretion was infinitely less, and in those where it was not in the least augmented, it did not present any notable change, with the exception that it was found to contain the ioduret of potassium.

Action on the Circulation.—The circulatory action has not appeared to be sensibly influenced by the ioduret of potassium; in general the pulse has been neither accelerated nor rendered slower. Under some circumstances, we have had reason to believe in a peculiar action on the circulation, because certain persons who labored under febrile excitement previous to the administration of the remedy, have had the febrile symptoms lessened or removed while it was used; in these cases I believe the modification of the circulation was not caused by the ioduret of potassium, but depended solely on the removal of the cause, of which the fever was only a symptom. In some persons, however, as a rare exception to the rule I have just laid down, the circulation has been increased in activity; but here again it is less by the direct action of the medicine on the circulation, than by the irritation it has produced in the alimentary canal, whether it has originated a gastro-enteritis, or that it has been given to persons whose digestive apparatus was already in a disordered condition.

While noticing the action of the ioduret of potassium on the blood itself, it has appeared to us, as was mentioned when speaking of its effects on the skin, that it renders the blood less plastic, and thus gives rise to hæmorrhages. We have seen nasal and pul-

monary hæmorrhages, and even sometimes hæmorrhage from the intestines, during the administration of the ioduret of potassium in persons whose blood was already impoverished, either from chlorosis, scurvy, or scrofula, or from an old taint of syphilis in the constitution which has injured it seriously.

Action on the Conjunctiva.—Following the phenomena just mentioned is one which is often met with, and which may cause much alarm to those medical men who are not in the habit of using the remedy in question. This phenomenon is its action on the conjunctiva.

The conjunctiva may be affected alone, or else together with the mucous membrane of the nasal fossæ or of the bronchia. The conjunctiva of one or both eyes is often seen to be affected in persons who are under the influence of the ioduret of potassium. The attack commences by a more or less general and more or less rapid vascular injection, to which is speedily added a tumefaction of the mucous membrane, and an infiltration, generally well marked, of the sub-mucous cellular tissue, which give rise to considerable chemosis of the eye and œdema of the eyelids. This species of ophthalmia, which may be named the *catarrho-œdematous*, presents the peculiar indication of the general effects of the ioduret of potassium on the mucous membranes—that is to say, the secretion is increased without any tendency, or very little, to suppuration. It has appeared to me, that in the great majority of cases these symptoms showed themselves when the use of the remedy was commenced, rather than when it had been administered a long while. I may add, that when it has once occurred, it is rare to see it attack the party a second or third time. It is very important to be aware of this effect of the ioduret of potassium on the eyes, because the peculiar ophthalmia it causes may be mistaken for a symptom of syphilis, more especially for gonorrhœal ophthalmia, with which it has some analogy.

Action on the Respiration.—I have noticed under certain circumstances some very remarkable effects of the ioduret of potassium on the respiratory apparatus. In a certain number of individuals from the first week of medication, and in others only after a much longer period, a peculiar coryza is noticed, which may be mistaken for a simple coryza, or for an exacerbation of the syphilitic symptoms affecting the nasal fossæ. In the particular cases of the action of the ioduret of potassium on the Schneiderian membrane, there happen the symptoms of the simple coryza, the mucous secretion being considerably increased, but with this peculiarity, that the discharge has much less viscosity, and has not any tendency to pass to suppuration. This rheum caused by the ioduret, to use a common expression, does not ripen, and even if, previously to the use of the remedy, there existed a purulent secretion from the nasal fossæ, unless it depended on caries of the bones, it will soon diminish under its influence, and sometimes disappear.

Action on the Bronchia.—In some cases, but not so numerous as the preceding, the effects just described as occurring on the pituitary membrane, take place with the bronchial. The symptoms of a peculiar kind of bronchitis then show themselves; the cough is very slight, and there is rarely present symp-

tomatic fever, but the patients generally experience a well marked difficulty of breathing, and bring up a large quantity of expectoration, similar to that observed in the first period of simple bronchitis. There is also this particular attendant circumstance, that the expectoration ceases as it began—that is to say, without passing to the purulent state. The stethoscopic phenomena, and those furnished by percussion, are the same, or nearly so, as in simple bronchitis.

Action on the Nervous System.—A less frequent effect, but still one requiring to be noticed, as occurring among persons to whom the ioduret of potassium has been administered, is a degree of cerebral excitement which has occasionally shown itself; symptoms of slight congestion, which have given rise to a condition analogous to that of the intoxication produced by alcoholic drinks. It has been already noticed by authors, and has received the name of the iodic intoxication. In these cases, we have also observed in some patients, a certain influence of the medicine on the agents of locomotion; some have been affected with spasms, and even a degree of subsultus tendinum. Dr. Guillon told me that a professional friend of his thought he had observed a double amaurosis in a man while under the influence of the ioduret of potassium. The man's wife was similarly affected. Statements of this kind, however, require a severe analysis before they are received.

Action on the Genito-urinary Organs.—The action of the ioduret of potassium, it has appeared to me, is also directed upon the mucous membrane of the urethra. I have, in some cases, had reason to attribute to this medicine the return of ill-cured gonorrhœas, or the exasperation of one already existing, so much so that if a patient be laboring under blenorrhagia, more especially if it be at all approaching the acute state, I consider it a counter-indication to the use of the remedy. Still there may be certain cases of blenorrhœa in which advantage may be derived from the use of the ioduret of potassium.

The remarks that have just been made respecting the action of this remedy on the urethra are equally applicable to the mucous membrane of the vagina and uterus. In some patients, laboring under uterine or utero-vaginal catarrh, and treated with the ioduret of potassium, I have seen the morbid secretion very considerably increased; it follows, therefore, that the existence of an acute utero-vaginal catarrh, or of one approaching the acute state, equally constitutes a counter-indication to its use.

If I were now to state the proportion in which the various maladies of which I have spoken occur, relative to the number of patients to whom I have administered this potent therapeutic agent, I should say that it is certainly a very small one; and I may add, that hundreds of patients take the ioduret, and are successfully treated by its use, without the occurrence of any of the pathological conditions I have described. I should also mention that there is not one of these maladies, even of those the most severe in appearance, which continues more than a week after the suspension of the medicine, or the modification of the dose. I have, hitherto, only met with five or six patients with whom I have been obliged, ultimately, to relinquish the medicine, on account of the constant pathogenic effects which it produces; in a great many, however,

I have been induced to modify the doses, or to suspend the use of the medicine for a time, on account of the occurrence of the effects to which I have just drawn the attention of practitioners, and which, like those caused by mercury, ought to serve as guides. In the employment of the ioduret of potassium we should adopt this common principle—to give the medicine in doses sufficient to modify and cure the complaint, without producing any of the annoying effects previously mentioned.

Besides, my experience enables me to establish as a positive practical fact that the morbid phenomena, which depend purely and solely on the action of the ioduret of potassium, do not require for their removal in a few days any other treatment than the suspension of the medicine, or the diminution of the doses in which it is administered. The pathogenic effects of this remedy are less permanent and persistent than those produced by mercury; they cease almost as soon as the cause that produced them is removed.

Although this sketch is doubtlessly very incomplete, it will serve, I trust, to point out several counter-indications, to which, hitherto, sufficient attention has not been paid. It will also show that in some circumstances, before administering the ioduret of potassium, certain complications must be removed, and certain predispositions combatted, which might, otherwise, have the effect of preventing the proper action of the remedy. Besides, a thorough knowledge of the therapeutic and pathogenic action of the ioduret of potassium will encourage timid practitioners to employ it in proper and sufficiently large doses, while it will serve to restrain those who unfortunately are inclined to use it in excessive quantities.

It is by proceeding in this manner that we are enabled to ascertain the doses in which the ioduret of potassium ought to be given. In the majority of cases it may be administered in the dose of a scruple and a half in the course of the day, that quantity being given at thrice, and, generally speaking, the same dose must be given for five or six days to judge of the effects produced. If the symptoms do not improve, and none of the affections that have been mentioned show themselves, each dose may be increased ten grains, making three scruples in the day, to be continued for five or six days, and then, according to the effects produced, the dose may be increased in the same proportion, or remain in *statu quo*, or, if requisite, diminished. My experience being now very extensive on this point, I may say that it is rarely necessary to exceed three scruples in the day; that six scruples should be the maximum, and that it is exceedingly rare to be obliged to give less than a scruple and a half in the twenty-four hours.

I use the following syrup freely in private practice:—

Syrup of sarza, 500 scruples;

Ioduret of potassium, 16 scruples. Mix.

Of this the dose is at first three teaspoonsful in the day, then six, nine, and twelve. The medium dose is six spoonsful three times a day.

When it is requisite to administer mercury at the same time with the ioduret of potassium, I prefer giving them separately, either in the form of pill or syrup. In the first place, because the prescription may require to be frequently changed; one of the two drugs requiring, perhaps, to be omitted, or the

dose lessened or increased, thus causing the loss of the medicines previously prepared; and, also, because patients do not bear so well the compounds of the ioduret of mercury and potassium as they do these iodurets administered separately, with intervals of one or two hours between each.

The remarks I have just made respecting the ioduret of potassium are applicable, in a great measure, to the ioduret of iron, a powerful remedy, which I have employed for many years, and from which I have derived great advantage. I should give it the preference to the ioduret of potassium, if its chemical composition were in general more regular and fixed. But I must say that at present, in the great majority of cases tried upon a very large scale, the ioduret of potassium has furnished me with the most favorable results. If the ioduret of iron ought to be preferred in some cases, although it is much less easily borne by patients, it is in those where there are scorbutic complications in anemic individuals—in those who are commonly said to have poor blood—in those cases, in fact, where chalybeates are indicated—and in those where the ioduret of potassium is followed by well-marked anti-plastic effects.—*Bul. de Thera.*, Sept.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, MARCH 18, 1843.

In some recent articles we thought it expedient to direct attention to certain acts of the medical corporations not eminently characterised by wisdom or consistency. The truth is that, whether we look to the original constitution of these corporations, to the motives by which they have been invariably influenced, or to the long series of selfish acts which have estranged from them the respect and regard of the profession—looking, we say, at all these circumstances, it is impossible to arrive at any other conclusion than that the corporations are unworthy to be trusted any longer with the regulation of medical education or the government of a larger and influential portion of the community.

Impressed, as we ourselves are, with this feeling, and knowing that it pervades a very great majority of our medical brethren in the United Kingdom, we look with the utmost anxiety to the forthcoming bill of Sir James Graham. Shall we receive at the hands of her Majesty's Government a complete and satisfactory measure of reform—a measure which, while it heals existing evils, shall consolidate the profession into an united and homogeneous whole? or shall we have a mere attempt to patch up the rotten fabric of corporate monopoly, and continue ill-gotten and ill-used power in the hands of those who have too long wielded it with little credit to themselves and still less benefit to the public or the profession?

The interests at stake in the question which is about to be resolved by Sir James Graham are of too

vital importance to admit of concealment, hesitation, or indifference. This is no time to cast a cloak over the faults of our adversaries—to waver between a choice of parties, or to look on with apathy when the struggle for independence is at hand. We tell the general practitioners of the United Kingdom that they must bestir themselves, and that instantly, unless they are prepared to sacrifice the efforts which they have hitherto made, and rest content with the degraded position which they now occupy. The corporations, having obtained the ear of Sir James Graham, are about to lay hold of his nose also, and much do we apprehend that great and grievous mischief will ensue, unless the profession come to the rescue and save the Home Secretary from the hands of those whom none can touch and remain clean.

The question is simply this—Is the forthcoming measure of medical reform to be enacted for the benefit of the profession, or for the benefit of the corporations? Are we to have some legerdemain attempt to remodel the Pall-mall and Lincoln's-inn institutions—a whitewashing of corporate platters—a crutch to support a couple of enfeebled frames, crippled by time and corrupt practices?—or, on the other hand, are we to expect a large and comprehensive law, applicable to the many, not to the few, and bringing with it contentment and joy, not disappointment and sorrow?

We fear that Sir James Graham has resolved on adopting the former plan, and that he is about to sacrifice the profession to the corporations. He has, at all events, announced an intention of granting new charters to the Colleges of Physicians and Surgeons previous to the introduction into Parliament of his promised bill on medical reform.

It is to save the Right Hon. Secretary for the Home Department from this absurdity, and ourselves from the consequences which must inevitably result from it, that we would call on all true friends of medical reform to resist this unwise, unstatesmanlike, and untoward proposal. It is a putting of the cart before the horse, which indicates either that the Home Secretary is ignorant altogether of the requirements of the profession or has been hoodwinked by the colleges and their representatives. The reform of the Colleges of Physicians and Surgeons has now become a matter of extreme indifference to all save an insignificant fraction of gentlemen who denominate themselves “pure.” Whether Dr. H—— was too long excluded from a fellowship into which he has at last “brawled” himself, or whether a representative of surgery might not have been found more worthy than Mr. C—— or Mr. G——, are questions which only regard a certain *clique* in London; they have no connection with science, no interest for the profession, no influence on the well-being of the community; yet the legislature is called upon to set up the Colleges of Physicians and Surgeons as two great idols, and the

profession invited to bow down before these golden calves, while the great body of general practitioners—the mass which really constitutes the medical profession in this country—are to be abandoned, without a shadow of representation, distracted, divided, and degraded.

It is unnecessary for us to point out the absurdity of separating the members of our profession into numerous grades, for the mere purpose of forwarding the interests of a few selfish persons to the injury of the public and the detriment of the practitioner. There is no natural distinction between the physician and surgeon; they are employed to relieve the diseases of the same body; they act on the same general principles; their treatment is based on the same laws of the animal economy, and in the cure of disease (distinguished from the removal of the diseased part) they employ the same remedial agents. If the object of medical science be to preserve health and cure disease, the medical man should be prepared, whenever occasion may require, to act both as physician and surgeon; for disease attacks the outside of the body as well as the inside, and health can only be maintained by a due performance of *all* the functions of the human frame. Although this plain and wholesome truth may now be contested, it was fully understood and expressly set forth by the founder of the College of Physicians.

In the 32nd of Henry VIII., c. 40, we find the following section:—"And forasmuch as the science of physic doth comprehend, include, and contain, the *knowledge of surgery, as a special member and part of the same*; therefore, be it enacted, that any of the same company or fellowship of physicians, being able, chosen, and admitted, by the said president and fellowship of physicians, may, from time to time, as well within the city of London as elsewhere within this realm, practise and exercise the said science of physic *in all* and every his members and parts, any act, statute, or provision, made to the contrary notwithstanding." Such were the sentiments of the founder of the College of Physicians; selfish and short-sighted men may now repudiate them, but they bear the indelible stamp of common sense, and must prevail.

We may, therefore, assume that the union of medicine and surgery into one "science of physic" is not only a return to the natural state of things, but also to the ancient and "time-honored" practice of our forefathers. The general practitioner should therefore be equally qualified in medicine and surgery; this qualification should be the same for all entering the profession, throughout the United Kingdom, and the privileges of all thus equally qualified should be the same. Having obtained, upon these just and simple principles, a body of medical practitioners fully, but equally qualified, enjoying the same privileges and governed by the same laws, the next and natural step would be to incorporate them into one

body—to create good feeling by union, and to raise the respectability of the profession by elevating the character of each individual member of it.

A reform founded upon these principles would be a reform for the benefit of the profession and the public; and to the attainment of this object we earnestly entreat the members of the profession to direct their efforts, firmly and without delay. If the corporations obtain the new charters which they are now seeking in secret, a great obstacle will be thrown in the way of the right adjustment of medical reform; the independence and respectability of the profession will, as heretofore, be sacrificed to the short-sighted views of a few insignificant, but wily monopolists, and the ostensible attempt to satisfy our demands will terminate in the infliction of a "heavy blow and a great discouragement" to the progress of our science and the practice of our art.

REPORT OF CASES,
WITH
CLINICAL REMARKS,
DELIVERED AT
UNIVERSITY COLLEGE HOSPITAL.

By Dr. TAYLOR,

Professor of Clinical Medicine in the College, and Physician to the Hospital.

Scurvy—Condensation of the Right Lung—Cure of the Scurvy by Citric Acid—Various kinds of Pectchieæ not accurately distinguished by Writers on Skin Diseases—Diagnosis between Scurvy and Purpura—Cause of Scurvy—Pathology—Treatment—Cured by Citric Acid—Injurious Effect of Mercury in this Disease.

William Stackley, aged twenty-four, was admitted, October 26, 1842, under Dr. Taylor. He is a young man of ordinary make, black hair and pale complexion, single, his business that of a tailor. He states that he has always had sufficient food until the last three months, during which time he has not lived so well as previously, never having meat more than twice or three times a-week; the meat he ate was always of good quality, but he had more salt than fresh meat—about double the quantity. States, also, that he does not like potatoes, and therefore did not take them, but had bread, and never greens, instead. He took his meals at irregular hours, sometimes going without his dinner, tea, or breakfast, and seldom had three meals a day, except on Sunday. Usually had one and a half to two pints of porter daily, and rarely took spirits. He has scarcely had any employment for the last three months, and during that time felt great depression of spirits. Resides in a dry, open situation. Both his parents are living and healthy; neither of them subject to cough, or, in fact, to any complaint; the rest of the family are healthy, with the exception of one of his sisters, who is subject to a severe pain in the side, and has frequent fainting fits. The patient does not consider himself strong, but has generally enjoyed good health. When four or five years old he had typhus fever, and was some years before he regained his usual health. He has had no other disease of any consequence; and only now and

then slight colds, never any severe enough to confine him, until last spring, when he had an attack, followed by a cough, which lasted six weeks. He had, at this time, pain in the shoulders and loins, and swelling of the right leg, from the calf to the ankle, with redness of the integument over the whole length of the shin-bone, the redness appearing before the swelling. He states that he was told at St. George's Dispensary that the disease was scurvy. He had no dark red spots about him at that time. At the commencement of August he got a chancre on the penis, which he never had before, nor had ever been troubled with gonorrhœa. On Sunday, October 23, he perceived a dark blotch inside each of his cheeks, which bled on the Monday, and the next day in greater quantity; black raised blotches also appeared on the tongue, which bled much.

Present Symptoms.—On the day on which he applied for admission he had blotches of ecchymosis on the inside of each cheek, and on his tongue and penis near the mucous membrane. He had, also, numerous dark colored spots on the legs, a few on the abdomen, back, and arms. These spots were of different sizes; in some places they were greenish, in others yellow, and some were purplish. His face was pale; his breath fœtid; and he had slight expectoration, colored with blood; neither urine nor stools contained blood. He was ordered—

Citric acid, one scruple;

Sugar, two drachms;

Water, one ounce and a-half. A draught to be taken thrice a-day.

To have a chop daily.

28. Tongue quite clean; the gums and the inside of the cheek do not bleed so much; some of the spots on the leg have become larger, and some confluent. There is one large blotch on the outer side of the calf of the right leg, very dark, surrounded with a greenish ring, and distinctly elevated. He complains of a cough, with slight expectoration of matter colored with blood, which he thinks comes from the mouth; pain of the right side at the summit of the chest; lies on the right side; pulse 88; appetite good; bowels rather confined; has made very little water during the last two days. Urine deposits an abundant precipitate soluble by the aid of heat and nitric acid.

Physical Signs.—*a*, Form and movements of the chest not altered; *b*, dulness on percussion over the greater part of the right lung behind; *c*, vesicular respiration feeble, and some bronchial respiration; *d*, anteriorly under both clavicles inspiration loud, puerile, and rather rough; *e*, expiration not much altered; *f*, vocal vibration stronger on the right than the left side. *Heart.*—The first sound of the heart is feeble, but otherwise nothing morbid.

31. Still some cough; respiration puerile under the clavicles, and at the lower part of the right side feebler than natural; slight crepitation occasionally; the upper third of the right side of the chest is duller on percussion than the left. Usually lies on his left side, but chiefly on the right since his admission; no blood in the stools. A spot of large size has appeared since last night upon the gums.

November 2. The old spots are all fading away, and no new ones have appeared. *Anteriorly* respiration is still distinctly puerile on both sides; *posteriorly*

it is slightly bronchial on the right side, vesicular on the left side; dulness on percussion over the right side posteriorly; he expectorates a little mucus; the urine is of a deep yellow color, with a small quantity of pinkish sediment; specific gravity, 1015; the clear part is affected by heat or nitric acid; the pink sediment dissolved by heat or nitric acid, or by caustic alkalis.

7. Very much improved as to the eruption, but says he does not feel stronger; urine perfectly healthy. On percussion posteriorly, the right is still duller than the left, and the respiration is bronchial at the same part where there is dulness. Omit citric acid.

Sulphate of quinine, three grains;

Dilute sulphuric acid, six drops;

Camphor mixture, one ounce. To be taken thrice a-day.

10. Urine healthy; specific gravity, 1017.

11. Continues to improve; spots have quite disappeared.

14. Still dulness on percussion on the right side of the chest posteriorly; respiration somewhat bronchial on the right side; very feeble in lower part.

16. Continues much the same as at the last examination. Vocal fremitus distinctly louder on the right side of the chest. To take eight ounces of blood by cupping from below the right scapula.

21. Expectoration is slightly colored with blood, which probably came from the mouth; pulse above 120, small, and soft; more resonance, on percussion, under the right clavicle than the left. Inspiration increased under both clavicles both in intensity and duration; expiration natural. Omit sulphate of quinine. To have five grains of blue pill thrice a-day; middle diet; discontinue the chop and porter.

25. Cough diminished; still some mucous expectoration; feels pain along the sternum on inspiring deeply; dulness on percussion on both sides of the chest posteriorly, most marked on the right side respiration somewhat bronchial on both sides; pulse 108.

28. Two or three blotches have again appeared on the leg; the right side of the chest still dullest posteriorly; inspiration louder and rather bronchial in character at the same part where there is dulness; respiration rather puerile in front on both sides; some dulness on percussion under the right clavicle, and in a more marked degree above it; vocal vibration, if any difference, strongest under the right clavicle; gums rather tender, somewhat red and spongy.

30. Soreness of gums increased. Five grains of blue pill every night.

Dec. 2. Left side somewhat duller anteriorly than right, most marked over the second rib near the sternum; expectoration consists chiefly of a thin watery fluid with some thick opaque portions in it. Omit blue pill.

Hydriodate of potass, four grains;

Camphor mixture, one ounce. Thrice a-day.

3. Urine sedimentary and acid; specific gravity, 1032; cleared by heat and nitric acid. He makes about two pints in twenty-four hours.

7. Respiration not so loud in front as it was; right side of the chest still dull on percussion.

16. Complains of pain in his right side.

19. Under the left clavicle there is dulness on percussion.

21. There is slight mucous expectoration to day.

Jan. 13, 1843. The cough more troublesome; expectoration muco-purulent.

Extract of conium, three grains;
Ipecacuanha, half a grain. A pill thrice a-day.

16. Expectoration consists of opaque, slightly yellow spots. On percussion in front duller on the right side, more marked under the clavicles, also duller behind on the right side; respiration has a slightly bronchial character over the right supra-scapular fossa; respiration in front too loud and rough on both sides; does not perspire much; pulse 120; aspect very much improved. Discharged.

In lecturing on this case, Dr. Taylor made the following among other remarks:—In this case the symptoms present, the bleeding from the gums, dark red blotches on the inside of the mouth, small circular spots raised by blood effused beneath the cuticle, and surrounded by areola, with the debility, indicated the disease to be scurvy, but there is one disease, however, with which it is liable to be confounded—viz., purpura.

Before considering the distinctions between scurvy and purpura, let me direct your attention to the fact that writers on skin diseases—as Willan, Bateman, Cazenave, and Rayer—have treated of these diseases under the same head, classing all under the name of purpura; they have also associated together every variety of petechial eruption, or of ecchymosis not arising from external injury, thus including diseases different in nature, causes, and treatment. Now, although it is comparatively of little importance by what name we call them, it is necessary to distinguish those appearances which belong to diseases essentially different and requiring different treatment. We may arrange them in the following manner:—

1. The eruption of typhus fever consists of small, generally slightly elevated, spots, about the size of a pin's head, at first of a pale red, and entirely disappearing on pressure, afterwards becoming of a darker red color; this is evident if you mark one of the spots with ink in order to examine it separately; at a later period it does not completely disappear on pressure, but almost always becomes a little paler; whether it does so at a still more advanced period is doubtful. This is a specific eruption as much so as that of scarlet fever or measles, and certainly is not hæmorrhagic. These spots are called *petechiæ*, and the fever which they accompany petechial fever.

2. Hæmorrhagic spots, which consist of effusion of blood into the substance or on the surface of the skin, but under the epidermis. These are sometimes, but not generally, elevated; they are at first dark colored, almost black, and do not become paler on pressure, and vary in size from a pin's head to a split pea, or you may have large patches. They are especially distinguished in their further progress by undergoing the same changes as spots of ecchymosis arising from a blow, passing through various shades of color—viz., green, blue, and yellow, before they disappear. These changes of color prove their hæmorrhagic nature, and form an important practical distinction between these spots and others of a different kind. It is this ap-

pearance which is seen in scurvy, evidently depending on an alteration in the quality of the blood.

3. In purpura simplex we see spots on the skin of a red color, sometimes bright, at other times livid red, not altered by pressure, not commonly elevated, although I think they may be slightly so, and varying in size from that of a pin's head to a split pea or more. These spots are generally supposed to be hæmorrhagic, because they do not disappear on pressure; but this is not a true ground of distinction. In many of these cases the spots are bright to-day, almost gone to-morrow; in other cases they disappear more slowly; in both cases without the changes of color before described. I remember a girl in the hospital who had a large red erythematous patch on the dorsum of the foot, not altered on pressure on her admission, which at the visit next day had entirely disappeared, without any discoloration similar to what takes place in ecchymosis. Hæmorrhage could not have disappeared in so short a time; and, moreover, in those cases where the spots disappear more slowly, as well as when quickly, they are not followed by any changes of color, showing that they are not hæmorrhagic, although unaltered by pressure. Spots of this kind occur as often in strong as in debilitated states of the system.

Diagnosis and Causes.—I have described three kinds of spots very different from each other, and depending on diseases different in nature, causes, and treatment, but all hitherto called petechiæ, and classified under the generic name purpura. Let us apply these facts to the diagnosis in this case; we may put aside the petechiæ of typhus fever, and consider whether the disease present was purpura simplex or scurvy. These differ in many respects. 1. Scurvy appears to depend on diet; according to some authorities it arises from want of sufficient food; but I think, with others, in consequence of a deficient supply of fresh succulent vegetables, as the result of which deficiency, the blood becomes vitiated, and persons thus imperfectly nourished become subjects of scurvy. Often we cannot discover from what cause purpura simplex arises, but we frequently find that the subjects of it are strong and healthy looking persons, which is the reverse of what we observe in scurvy. 2. Purpura may come and go quickly, whereas scurvy is a chronic disease, both induced and cured gradually. 3. Scurvy, also, is cured by lemon juice and fresh succulent vegetables, whereas purpura is not certainly cured by such means, but is often benefitted by bleeding and debilitating remedies, which would not cure scurvy. 4. The livid and spongy gums, the indurations in the limbs, and the changes of color of the spots, which occur in scurvy, are not seen in purpura simplex. Whether purpura hæmorrhagica is the same as scurvy I will not pretend to say, as the subject requires further investigation; but purpura simplex and scurvy certainly differ. If we look back to the history of our patient, I think we shall be furnished with the means of making a correct diagnosis. It appears that he had been living on an insufficient quantity of meat, and that which he had was usually salt meat; that he had not taken potatoes nor greens, as he preferred bread; there was, therefore, a deficient supply of vegetables. He took his meals, also, very irregularly, seldom having three a-day, except on Sunday. Last spring he took cold

which lasted six weeks, and had swelling of the integuments of the leg, which he was told at St. George's Dispensary was scurvy. There can be no doubt that he was affected with this disease when admitted into the hospital; all the ordinary symptoms, as sponginess of the gums, livid spots, blotches of ecchymosis on the skin and mucous membrane, fetid breath, and debility, being present. With regard to the affection of the chest, it appeared to be condensation of the right lung, especially of the back part. As to the cause of this state of lung, there was no evidence of previous inflammation. 2. It did not seem to depend on effusion of blood consequent on scurvy, for it did not increase, and was very extensive. 3. It appeared, therefore, to be most likely that it was caused by tubercular deposition, for dulness was greatest in the upper two-thirds of the lung behind.

Pathology.—Scurvy, as I have said, appears to consist essentially of a morbid state of the blood, produced by the kind of diet mentioned. According to the analysis of Dr. Budd and Mr. Bush, the blood was found to be deficient in coloring matter, and to contain rather an excess of fibrine. This gives rise to all the symptoms.

Treatment.—For the scurvy he was ordered a scruple of citric acid three times a-day, good diet, and half a pint of porter daily. It is said that the fresh lemon juice is more efficacious than the crystallised acid in curing the disease; whether it is so or not I cannot say, but the efficiency of the latter as a remedy for scurvy is undoubted. The quantity ordered was about equal to that supplied to each man in the navy, or rather more.

He was admitted on the 20th of October. On the 7th of November the report states "that the spots were nearly gone, but the patient feels weak;" he was, therefore, ordered quinine in place of the citric acid. As the condensation of the lung did not appear to depend on effusion of blood consequent on scurvy, for it did not decrease and was very extensive, there was a possibility of its being from inflammation; hence, he was cupped beneath the right scapula, and ordered mercury till the gums were sore, and afterwards iodide of potassium, but without any alteration in the state of the lung. It has been stated that mercury is exceedingly injurious in scurvy, and this case certainly corroborated that opinion, for we find that within a week after the blue pill was ordered some of the spots returned.

Although the chest affection remained the same, and it appeared most probable that it was tubercular, under the treatment he was cured of scurvy, and left the hospital much improved in appearance and flesh.

REVIEWS.

A Practical Treatise on Venereal Diseases; or, Critical and Experimental Researches on Inoculation, applied to the Study of these Affections, with a Therapeutical Summary and Special Formulary. By PH. RICORD, M.D., Surgeon to the Venereal Hospital of Paris, Clinical Professor of Special Pathology, &c. Translated by HENRY PILKINGTON DRUMMOND, M.D. Longman and Co. 8vo. pp. 381.

This book is simply a translation of M. Ricord's work; it contains no additional matter, but has the

merit of conveying correctly and clearly the meaning of the French surgeon. Occasionally will be met a word such as "abortive," which may puzzle the few who are altogether ignorant of the French language; but the translator, fully aware of the objections to the introduction of such terms, excuses himself by saying he adopts them from a desire to adhere closely to the original. Occurring but seldom, and, as it were, neutralised by Dr. Drummond's apology, they do not interfere with the utility of his book, which, however, would be better without them.

Some of our friends may wish, before ordering such a book, to have some idea of the matter it contains; we shall, therefore, give a brief analysis of M. Ricord's work.

The title should have been somewhat modified, as two hundred and fifty pages are devoted to the subject of inoculation, and one hundred and twenty to therapeutic remarks. M. Ricord would have been more correct in calling his book *An Experimental Inquiry into Venereal Inoculation, with some Remarks on the Treatment of Venereal Diseases, &c.*

It should be remembered that Dr. Drummond (as he informs us in the preface) has omitted several cases, but the omitted cases are similar in details to several of those which have been retained; and at page 249 will be found a tabular statement of all the inoculations performed at the Venereal Hospital for several years.

M. Ricord does not claim complete originality for his experimental researches into inoculation, with honorable candour quoting, at considerable length, the prize essay of M. Hernandez, of the French navy, published so long ago as 1812. M. Hernandez performed many experiments, and inferred the non-identity of the syphilitic and gonorrhœal poisons. The style of his essay is at once elegant and nervous, and proves the author to have been well acquainted with the writings of the best authors, French and foreign. M. Ricord, however, has ascertained additional facts regarding inoculation. Having devoted some pages to preliminary remarks, and a statement of his views and conclusions, M. Ricord proceeds to record his experiments.

In Dr. Drummond's translation, the particulars of fifty cases of gonorrhœa are recorded, in which inoculation was tried with a negative result. In some cases a trifling papula or redness was produced, but never anything approaching to the character of a chancre.

The details of forty cases of chancre are related, in which inoculation was practised (including two from the thesis of M. Lavergne). In thirty-two of these the "characteristic ulcer" followed the inoculation, and always was promptly cauterised. M. Ricord is decidedly of opinion that the ulcer produced by inoculation does not increase the liability to secondary symptoms, if it be destroyed before the fifth day of its actual existence—a conclusion which he draws as well from the recorded experience of many eminent surgeons as from his own.

In eight cases of chancre in the stage of reparation

or granulation, inoculation did not produce the characteristic sore.

M. Ricord has produced the characteristic ulcer of syphilis by inoculation with the pus of a chancre, which had been present for eighteen months; notwithstanding its long existence, the chancre did not exhibit signs of reparation.

Forty-two cases of inoculation with the pus of buboes are given, of which twenty-four yielded a positive result.

The result was negative in eighteen cases, and in five of these the buboes were primary (*d'emblée*); one was really an abscess in the cellular tissue surrounding the inguinal glands, which were themselves but slightly swelled. One case presented two enormous scrofulous buboes, which could not be attributed to a venereal infection, as four months had elapsed since the patient had sexual intercourse, and a year since he had chancre; three (of which one succeeded small, quick-healing chancres, the other gonorrhœa) yielded a pseudo-pustule on inoculation.

M. Ricord frequently found that the deep-seated pus proceeding from a gland really infected with syphilis produced the characteristic sore on inoculation, when the more superficial matter taken from the same swelling yielded no results.

Inoculation was tried in eighteen cases of secondary affection, but without result.

The following is a tabular statement of M. Ricord's inoculations:—

IN THE MALE WARDS, 1831—1837.

SYMPTOMS WHOSE PUS PRODUCED THE CHARACTERISTIC PUSTULE.

Primary Syphilis.

Chancres in the ulcerative or progressive period—

On the penis	347
At the anus	9
Concealed in the urethra (larvée)	21
On the lips	3
In the throat	1
On other parts	8

Primary pustules—

On different parts consequent on coition, or from artificial inoculation	59
--	----

Virulent abscess or encysted chancres—

In various situations	18
---------------------------------	----

Symptomatic lymphitis, or chancres in lymphatics—

Inoculated upon the day of their being opened, or later	11
---	----

Symptomatic bubo, or ganglionic chancres—

Inoculated the day they were opened	42
„ „ following day*	229

* Of these latter, 214 had been inoculated without result on the day of the opening.

IN THE FEMALE WARDS, 1831—1836.

Primary Syphilis.

Chancres in the ulcerative period—

On the vulva	139
„ vagina	2
„ cervix uteri	12
Concealed	6
At the anus	28

On the lips	4
In the throat	2
On diverse seats	6

Primary pustules—

On various seats consequent on coitus; on the internal surface of the thigh, or from artificial inoculation	27
---	----

Virulent abscess or encysted chancre—

In various situations	8
---------------------------------	---

Symptomatic buboes, or ganglionic chancres—

Inoculated upon the day of their being opened	21
„ „ following day, or later	46

IN THE MALE AND FEMALE WARD, 1831—1837.

SYMPTOMS WHOSE PUS PRODUCED NOTHING.

Symptoms of Transition.

Chancres in the period of reparation

Secondary Syphilis.

Mucous tubercles, or pustules on various seats	221
--	-----

Secondary ecthyma	10
-----------------------------	----

„ rupia	9
-------------------	---

Ulcers (consequent on mucous tubercles, ecthyma, rupia, or impetigo)—

In the fossæ nasales	19
On the lips	14
„ palate	4
In the throat	81
At the anus	41

Tertiary Syphilis.

Tubercles ulcerated in the whole thickness of the skin in various situations	21
--	----

Tubercles in the cellular tissue, or gummy tumors ulcerated, on various seats	11
---	----

Periostoses having suppurated	15
---	----

Caries	10
------------------	----

Venereal Affections, not dependant on the Syphilitic Virus.

Spontaneous buboes	39
------------------------------	----

Sympathetic „	248
-------------------------	-----

Gonorrhœa in the acute stage—

Of the glands and prepuce (balanitis)	82
---	----

In the urethra	291
--------------------------	-----

„ vulva	31
-------------------	----

„ vagina	82
--------------------	----

„ uterus	27
--------------------	----

At the anus	36
-----------------------	----

Ophthalmia	6
----------------------	---

Gonorrhœa in the chronic stage, having

various seats	112
-------------------------	-----

Ulcerated swelled testicle	3
--------------------------------------	---

Non-characteristic Symptoms, which show themselves after Venereal Affections, whether Simple or Virulent.

Vegetations, either ulcerated or not, having various forms and seats	28
--	----

Affections not dependant on Venereal Diseases. Comparative Experiments, with Negative Result.

Atonic ulcers of the legs	6
-------------------------------------	---

Simple ecthyma	5
--------------------------	---

Herpes	4
------------------	---

Scorbutic ulcers	2
----------------------------	---

Scrofulous	6
----------------------	---

Caries	4
------------------	---

Simple ulcerated stomatitis	8
---------------------------------------	---

Ulcerated eczema intertrigo	2
Otitis	2
Cancer of the uterus	5
" rectum	6
" breast	2
" penis	3
" nose	4
Abscess on various parts	15

Inoculation was extensively practised by M. Mairion at the hospital of Louvain. The matter of eighty-five primary ulcers was inoculated; in fifty-three cases the characteristic ulcer followed the inoculation, and was reproduced "to several generations" by fresh inoculations. As long as the chancre was progressive, inoculation reproduced the chancre. In thirty-two cases the inoculation was followed by a negative result. In the same year numerous inoculations were made with the pus of common wounds, ulcers, fistulous passages, and always with a negative result.

M. Mairion experimented in twenty-four instances with the pus of buboes, and concludes that the pus of buboes that accompany chancres, and have suppurated, has generally produced the characteristic pustule on inoculation, and that the buboes which have accompanied ulcers, the specific property of whose pus has been disproved by inoculation (at the proper period), have never, even when they have suppurated, produced any result on inoculation.

M. Mairion inoculated the matter of eighty-five cases of gonorrhœa. In eighty instances the result was negative; in four chancres were produced, which again produced others; in one case the result was not noted.

The therapeutic remarks of M. Ricord show that his practice both in primary and secondary affections is very similar to that which has been long adopted by many judicious English surgeons; nevertheless, this portion of his book will be read with great advantage, as his practical directions are serviceable by their minuteness, even when referring to drugs or measures in ordinary use. This may be said especially of his observations regarding the administration of copaiba and cubebs, the employment of injections, and the treatment of venereal diseases in the female.

We may safely say that the translation of M. Ricord's interesting work will be a valuable addition to the library of those who cannot read the French language with facility, whether they be surgeons desirous of gleanings knowledge practically available in treating venereal affections, or physicians curious to ascertain the laws which govern the agency of one of the most formidable of morbid poisons.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

February 28, 1843.

The PRESIDENT in the Chair.

On Fatty Degeneration of the Arteries, with a Note on some other Fatty Degenerations. By GEORGE GULLIVER, F.R.S. [Communicated by Dr. HODGKIN.]

The author, remarking how vaguely the epithets, atheromatous, steatomatous, &c., have been applied

by pathological writers to diseased arteries, and that the morbid deposit between the middle and inner coats, and in the substance of the former, has not, as far as he knows, yet been submitted to precise examination, gives the result of his own observations, from which it appears that the disease is really of a fatty nature. A microscopic examination of it brings into view a multitude of crystalline plates, fatty globules, with albuminous and earthy particles. Several specimens of the crystals were sent for examination to Dr. Davy, who ascertained that they are of cholesterine.

The fatty matter is easily extracted by boiling alcohol, and the crystals of cholesterine are seen to be deposited as the solution cools. The author has examined numerous specimens of the disease, and never failed to observe these crystals and the fatty globules in the deposit, and also generally in the substance of the altered middle coat. The microscopical characters are given in two figures.

The accuracy of Dr. Davy's observations (see his "Researches, Phys. and Anat.," vol. I., pp. 372 and 436) as to the thinning, &c., of the middle coat of the artery, is confirmed by Mr. Gulliver.

The importance of fatty degeneration of the coats of the arteries is insisted on, especially as to its general connection with thickening and puckering of the inner membrane, with aneurysm, with obstruction, occlusion, or ossification of the vessels, and of those ruptures of them which are so frequently the cause of sudden death.

The author adds, that fatty degenerations are more common and of more importance than has yet been supposed. He mentions obstruction, by fatty particles, of the seminal tubes; and notices fatty degeneration of the blood, lungs, &c. The disease he describes as being more remarkable in "brown consolidation" of the lungs than in red consolidation; and these two diseases are described as affording distinct morbid products.

A Normal and Abnormal Conscious State, alternating in the same Individual. By JOHN WILSON, M.D., Physician to the Middlesex Hospital.

This case occurred in a boy, aged fourteen, a patient in the Middlesex Hospital, who is said to have complained of headache for two or three days, but whose appearance was healthy. For three or four days his appetite was inordinate, seizing upon any article of food he could meet with in the ward, though allowed full diet. When not eating or seeking for food he generally slept night and day. This abnormal state continued for three or four days, when he recovered his natural state of sleep, appetite, and consciousness. Then he had no recollection of what he had done, or of what had happened to him since his admission.

He was shortly discharged, but twice readmitted, each time presenting the same symptoms—i. e., alternations of consciousness and unconsciousness.

No treatment was adopted. The author, for the present, reserves his opinion and inferences drawn from this case; his object is to invite further examination for similar cases; and when such occur then will be the time for discussion.

RETROSPECT OF THE MEDICAL SCIENCES.

ABDOMINAL PUERPERAL NEURALGIA.

Dr. Golding Bird, in a communication published in the January number of the "Edinburgh Monthly Journal," draws the attention of the profession to a peculiar form of neuralgia arising from uterine irritation after parturition, which rather closely simulates the characters of puerperal peritonitis, and has often, as he believes, been mistaken for it. He narrates three cases in illustration of his remarks, in each of which the complaint was apparently removed by remedies, which certainly could not have cured the puerperal inflammation. He observes that at a time, varying from a few hours to a few weeks, after parturition or miscarriage, we occasionally find excessive irritation of the uterus, attended with intense neuralgic pain over the abdomen, and a suppression of the lochial discharge manifested, producing, as might be anticipated, a disordered state of every function of the body, and giving origin to a set of symptoms often mistaken and treated for puerperal fever or peritonitis. In the first case narrated by Dr. Bird, that of a woman whose nervous system had been from the commencement of menstruation always more or less deranged from an irritable state of the uterus and its attendant, hysteric epilepsy, forty-eight hours after the termination of labor, the peculiar set of symptoms indicative of intense uterine irritation supervened. The suppression of the lochia and urine, the position of the patient in bed, the pulse, state of the tongue, skin, and abdominal tenderness, all preceded by rigors, appeared to indicate that much-dreaded disease, puerperal peritonitis; but the incoherent screams, the wild and unmeaning expression of countenance, the tossing of her arms, and the constant shifting of her position in bed, as well as the crying out on the mere approach of the hand to the abdomen, and the pain occurring in paroxysms, pointed out, on the other hand, the existence of excessive irritation, and unmasked the true character of the disease. The result of the treatment by the use of fomentations, purgatives, and opiates, fully justified the prognosis. Still, however, a degree of uterine irritation persisted, evidenced by pains about the loins, hips, and pubes. The bowels were next allowed to become constipated for two days, the consequence being the re-occurrence of rigors, cessation of the uterine discharge, and an apparent attack of intense pleurisy. A careful examination of the symptoms, however, demonstrated the neuralgic character of the complaint, and she was again relieved by purgatives and opiates, by which the discharge of numerous scybalous masses was obtained.

The second case occurred in the person of a young woman, who, from the commencement of her first menstruation, had been the subject of those pains characteristic of uterine irritation, and which became more severe at each menstrual period. The bowels were habitually constipated, and she always suffered more or less from leucorrhœal discharge. The attack was induced by exposure to a draught of air, whilst in a state of perspiration, eleven days after parturition, and in its symptoms resembled puerperal peritonitis, for which it was mistaken by a practitioner who had been called in before Dr. Bird saw her.

Fomentations and saline aperients speedily removed the complaint.

Dr. Bird, aware that the objection might be urged, that these cases of neuralgia arose from intestinal irritation, observes that we have equal evidence of derangement of every function of the body; the secretions of the skin and kidneys are in most instances deficient, those of the liver and mucous surfaces are always more or less vitiated, and the bowels, though often constipated, are occasionally acting too energetically, or in some cases are tolerably regular; but the uterine functions are, as far as Dr. Bird has seen, invariably affected, the secretion being either entirely arrested or becoming very fetid and viscid. He does not consider it reasonable to suppose that a slight constipation—a symptom of such frequent occurrence during the puerperal state—could develop so serious a train of symptoms, unless some other function was so manifestly imperfect as to produce a generally irritable condition of the nervous system, and thereby render the body obnoxious to attacks of disease from exciting causes, which, in the ordinary state, and when free from such depressing influences, would be almost without action upon it. He regards the depressed state of the nervous system produced by the irritable condition of the womb, as the predisposing cause of these attacks, and any slightly deranged function, whether of the skin, liver, or bowels, will act as an exciting cause upon such a deranged state of the system, and develop in full force the severe neuralgic attacks under consideration.

With regard to the diagnosis of these neuralgic affections, the comparison of the different symptoms presented by the patient will generally be the best guide of the practitioner. Every symptom of genuine peritonitis may be present in these attacks, but not at the same time; again, the accession of the pain in paroxysms, the screaming out ere the hand is in contact with the abdomen, or when it has barely touched the parietes; the fact of our being often able to apply considerable pressure without pain, when the patient's attention is arrested by a sudden exclamation, an abrupt query, or her infant's cries, will generally enable the practitioner to detect the true nature of the disease. The excessive depression of spirits, and often the strange and groundless delusions of the patient—the accession of an occasional hysteric convulsion—will also assist in forming a correct diagnosis, a task at all times of no small difficulty in these cases.

There is one very curious circumstance connected with this subject, that when a rumor has been spread abroad of a patient having died of puerperal fever, almost every other woman in the neighbourhood who happens to be confined is seized with the symptoms just narrated with greater or less severity, an effect somewhat analogous to that produced on the nervous system of some women who see another the subject of hysteric fits.

SPINAL IRRITATION.

Dr. Guy, of King's College Hospital, in the report of that institution for last year, which is just published in the "Medical Gazette," states that he has found spinal tenderness to be generally accompanied

by pain in the abdominal parietes, more rarely by acute pleurodynia, and in other cases by pain in both these situations. The pain in the abdominal parietes, like that in the side, is generally confined to the left side, and when it extends to both sides is more acute on the left. It is often so severe as to make the patient cry, thus often causing the case to be designated hysteria, with which, in a few cases, it may be complicated. Dr. Guy adds the remark, that perhaps there is not any suffering which so often makes the patient cry as that produced by muscular pains; he has observed this so generally, that he looks for these pains rather than for any deeper-seated mischief, whenever females present themselves in tears.

The ascertained causes of spinal irritation in connection with muscular pain of the abdomen or chest, in thirty-three cases, were as follows:—Constipation in four; diarrhoea in four, of which one was complicated with hysteria; dyspepsia in four, of which one was complicated with hysteria; gastritis in one; gastro-enteritis in one; leucorrhœa in four, of which one was combined with prolapsus uteri; dysmenorrhœa in one, in which dry cough was present; gonorrhœa in one, and cystitis in one. Constipation and leucorrhœa were jointly present in two cases, in one of which there was scanty menstruation; constipation and menorrhagia in one case, and here hysteria was also present; constipation and amenorrhœa in one, constipation and dysmenorrhœa in one, constipation and gastritis in two, constipation and dysuria in one. Diarrhœa and leucorrhœa were combined in two cases, in one of which there was dry cough; gastritis and menorrhagia in one, gastritis and dysmenorrhœa in one. In two cases there was not any assigned cause.

In one case, in which spinal irritation was accompanied by dry cough, leucorrhœa was present; and in one case epilepsy was found in combination with spinal irritation and leucorrhœa.

Whenever a female presents herself, complaining of acute pain in the chest or abdomen, and, as often happens, expressing her suffering by tears, the spine should be examined, when tenderness will generally be discovered in some part or other of the vertebral column, and most commonly in the dorsal region. The connection of the spinal tenderness with the pain will appear on striking the tender portion of the spine, when pain will be felt not only in the tender spot, but darting towards the affected muscle. When cough is present, it will be produced in like manner by striking the tender portions of the spine. These pains will be often found in combination with that peculiar state termed *mimosis inquieta*, in which it will be necessary to combine the treatment proper to that condition of system with the counter-irritation to the spine, the local applications to the seat of the pain, and the remedies adapted to remove the cause of both.

Dr. Guy describes *mimosis inquieta* as the restless, uneasy, nervous state into which females are apt to be thrown by sudden shocks, by long-continued anxiety, or by slow drains upon the system.

The group of symptoms which characterise this state of system in its most marked form are, palpitation, with a small, quick, and frequent pulse; dyspnœa, tremblings, shiverings, occasional flushings

of the face, sudden perspirations, wandering pains, fixed pain at the top or back of the head, a sensation of cold water dripping on the back of the head and down the spine, giddiness, loss of recollection, low spirits, ill-founded apprehensions (sometimes a fear of having committed some great crime), sleep disturbed by hideous dreams, from which the patient awakes startled, starting at the slightest noise, anorexia, flatulence, constipation. There is sometimes tenderness of the spine, with reflected muscular pains, and sometimes, though rarely, well-marked hysteria.

The principal causes of this state are the following:—Fright, long-continued anxiety or grief, great fatigue, long watching, change of life, suppression of the menstrual discharge in persons of middle age, debilitating discharges, as hyperlactatio, leucorrhœa, menorrhagia, diarrhœa, repeated loss of blood. It is also frequently present during convalescence from debilitating diseases. In one case, that of a female, aged thirty-nine, the disease came on after a walk of seventy-seven miles in three days. The treatment of this disease, in addition to the removal of the ascertained cause, and the regulation of the functions of the alimentary canal, consists in a combination of tonics and sedatives.

THE PROPORTION OF CARBONIC ACID FORMED IN TYPHUS.

Dr. Malcolm, of Belfast, has instituted a series of upwards of fifty experiments on the air expired by patients laboring under all types of the disease, and in all its stages. They were performed during the months of May and June, and invariably at one period of the day—viz., between the hours of eleven o'clock, a.m., and two o'clock, p.m., corresponding to the period when, according to Dr. Prout, the maximum proportion of carbonic acid gas is generated. Great care was taken in collecting the respired air, and in subjecting it afterwards to chemical analysis. The manner of breathing of the patient, the density of the atmosphere, temperature, age of the patient, and his mental state, were also carefully noted.

He concludes, from the results of his experiments, that in typhus fever the formation of carbonic acid gas during respiration is considerably less than in a state of health, the difference being, as nearly as possible, 1.5 per cent.—a difference which, in a number of cases, is much increased, and one too large to be the result of accidental circumstances. The quantity generated is least in the more severe forms of the disease. The diminished proportion, however, is not at all uniform, on some occasions the number being very low indeed, and in others rising to even as high as 2.7 per cent. The difference between the proportion of carbonic acid gas generally, as influenced by fever, and in the severe forms, is, it may be observed, as nearly as possible 2 per cent.—a difference, perhaps, too small to form the basis of any general conclusion.—*Lond. and Edin. Med. Journ.*, Jan. 1843.

INTRODUCTION OF AIR IN THE VEINS.

The "*Annales de la Chirurgie Française et Étrangère*" contain a communication, by M. Marchal de Calvi, on the introduction of air into the veins, in the course of which he offers a new explanation of the cause of death produced thereby. The opinion that it depends on the distension of the heart,

by which its contractions are prevented, is, he admits, supported by the experiments of Nysten with the different gases, but he says it does not explain those cases where the death is so frightfully sudden, as if the patient had been struck by lightning, and which resembles the immediate effect of a poisonous dose of prussic acid. In these cases there must be, he thinks, some toxic agent, and then arises the question, what is that agent? Hitherto to this there has not been offered any reply, but M. Marchal thinks he has found the answer, by discovering the presence of carbonic acid gas in the heart, which he is of opinion is disengaged every time air is introduced into it through the venous system. In this he is supported by the appearance of the blood in the pulmonary cavities of the heart, which, instead of being black, is red, it having been decarbonised by the contact with the atmospheric air, the oxygen of which has combined with its carbon, and formed the carbonic acid gas, to the action of which M. Marchal refers the death of the patient; and again, if, in performing experiments on this subject, the operator breathe through the tube into the vein, instead of injecting the purer air around him, the fatal effect will be much more rapidly induced, there being carbonic acid gas already generated in the injected fluid. The experiments of Nysten, however, with carbonic acid gas and oxide of carbon do not support this hypothesis.

EVENTRATION.

M. Wolfram, of Berlinchen, was called to a boy, eleven years of age, employed as a swincherd, who had been attacked by a boar, and seriously injured. On his arrival, M. Wolfram ascertained that the abdominal parietes had been torn open, so that the stomach, the lacerated omentum, the colon, and small intestines escaped externally, the boy being obliged to support them with his hands. The wound, which was on the left side of the abdomen, rather more than an inch from the umbilicus, was from seven to eight inches long externally, and from four and a half to five and a half only internally. There was in addition a wound seven inches long on the outside of the left thigh, penetrating to the bone, with another, a circular one, near it, as large as a franc piece.

The wounds and prolapsed viscera were carefully washed with warm water; the latter then were replaced gradually into the cavity of the abdomen, and the edges of the wound were brought together and maintained in situ by five points of suture, with intermediate slips of adhesive plaster, and a proper compressive bandage. The wound in the thigh, on account of its great depth, was also united by suture. Cold applications were had recourse to; small doses of calomel were given every two hours, and leeches applied the next day to the abdomen. Some slight abdominal pains and fever followed, but were soon subdued. The sutures were removed on the sixth day, and by the fifteenth the cure was complete. The patient was then permitted to walk, the abdomen

being supported by a bandage.—*Caspar's Wochenschrift.*

M. BOUILLAUD.

M. Bouillaud has been elected, for the third time, member of the Chamber of Deputies for Angouleme. The two previous elections had been declared void through informality.

DR. HOPE AND M. LIEBIG.

The "Gateshead Observer" mentions a report that Dr. Hope will retire from the chair of chemistry in the University of Edinburgh at the close of the present session, and be succeeded by Professor Liebig.

BRISTOL INFIRMARY.

Mr. Clarke has been elected surgeon to this institution, in the place of Mr. Smith, deceased.

INSPECTORSHIP OF PRISONS.

Mr. J. G. Perry, secretary to the Medico-Chirurgical Society, has been appointed to this office, vacant by the death of Dr. Shortt.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, March 10, 1843.

P. Walsh, G. W. Bagg, R. Lee, W. Mitchell, W. B. Francis, J. Arthur, J. Ness, J. O. Goodridge, T. J. Austin, F. P. Smith.

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TO CORRESPONDENTS.

Mr. Flood's work on *Phthisis* has just come to hand. *Mr. Mayo*.—We regret to say that it is perfectly true that this gentleman has taken to the water system in Germany. His only excuse can be, "Necessitas non habet leges." The hospital surgeons of London should have subscribed something for him, and saved the profession from this scandal.

ERRATUM.

By an error of our printer's, Mr. Bennett Lucas' last clinical lecture was dated as having been delivered on "January 27," instead of *Friday, February 21.*

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CLINICAL LECTURES

DELIVERED AT THE

METROPOLITAN FREE HOSPITAL

BY MR. BENNETT LUCAS,

Senior Surgeon to the Institution, and one of the Lecturers on Anatomy and Physiology at the Westminster Hospital School of Medicine.

Lecture VII.—March 10, 1843.

GENTLEMEN,—Before making any observations on the second stage of gonorrhœa I shall first detail to you the continuation of the case of Thomas —, who was under treatment when we last met; and I shall also read the memoranda of one other case, which I have selected out of the many who have presented themselves within the last month, affected with this stage of the disease.

Feb. 27. Thomas —, aged forty-one. Discharge has nearly ceased, and is muco-purulent; he has slight chordee and soreness along the urethra, from the external orifice to near the bulb; his urine comes very slowly from him, and in a small stream; he makes water six or seven times in the day, and has also to get up at night frequently for the same purpose. The abscess, which was in the perineum, is entirely healed; the bulb is much diminished in size, and is movable in the perineum; but it is still harder to the touch than it should be. He does not experience the pain in the perineum when he coughs, which he did before the abscess was opened. He was ordered to take an emulsion, containing fifteen drops of solution of potash in each dose, every fourth hour; an anodyne draught at night; and to foment the perineum frequently in the day with hot cloths.

March 10. A bougie has been introduced four times since last report; considerable difficulty was experienced at first to make the instrument enter that part of the urethra corresponding to the late perineal abscess. His gonorrhœal symptoms have subsided.

CASE IV.—William H—, aged fifty-three, unmarried, has had gonorrhœa three times, the last about seven years ago, at which time he had the usual discharge, and but slight scalding at the glans.

Feb. 24. Had connection a fortnight ago, and twelve days afterwards his disease commenced, with a yellow discharge, and without any premonitory symptom. Since then the discharge has continued to increase, and is now very profuse; is of a yellow color, and stiffens his linen. He now complains of slight scalding at the glans when he makes water; his bowels have been unmoved for three days. He was ordered to take the aperient mixture of the hospital every third hour, until his bowels were freely opened, and to apply the following day.

25. The medicine has affected his bowels four times. The discharge is sensibly diminished, is of the same appearance as yesterday, and comes from not

more than two inches of the urethra; the scalding still continues, but, with the exception of this symptom, there is no evidence of inflammation, nor any redness of the lips of the urethra. He was ordered to take two grains of sulphate of zinc and three of extract of gentian, three times a day.

28. Not improved; the discharge is the same in quantity and appearance, and the scalding continues. To take a drachm three times a day of a mixture containing equal parts of spirits of turpentine and balsam copaiba.

March 10. This patient has not attended since last report.

Gentlemen, the second stage of gonorrhœa is characterised by a purulent discharge from the urethra; in color of a brighter yellow than that of healthy pus; of a more offensive odor than that fluid, and rendering the linen upon which it is deposited stiff and crispy when dried. There is always intermixed with this specific secretion some of the natural fluid which the urethra in a state of health so sparingly affords, but which in gonorrhœa is increased in quantity, owing to the irritation kept up in the canal by the disease. In the first stage of gonorrhœa, before the purulent secretion is abundant, the stains on the linen give evidence of both mucus and pus, as I have already remarked to you; in the second stage of the disease, however, no such evidence is afforded, and we judge of the intermixture of mucus with the specific discharge by the stiffness of the stained linen, which is generally so much greater than that produced from the secretion of a healthy purulent sore. The offensive smell of the discharge is different from that of healthy pus; it is more marked in character, not so mawkish—indeed it is difficult to find a word which will correctly express this sensible character; at the same time it is not unimportant to remark that its odor is very different from that of the secretion which proceeds from the glans, the inner prepuce, or from both in balanitis, and which is always most offensive.

The quantity of discharge afforded in this stage of gonorrhœa appears to depend on many circumstances. In some cases it is very profuse, and this at a time when we would least expect it to be so; such, for instance, as when but a small portion of the urethra is engaged. Thus, soon after the commencement of the second stage, as occurred in the case of Robert —, the discharge may be so great as almost to pour from the urethra, and yet but a very small extent indeed of the canal be affected. On the other hand, as in the case of Wm. —, the discharge may be comparatively small in quantity, and the urethra at the same time be engaged from its external orifice to the perineum. We also have constant opportunities of remarking, in the third stage of gonorrhœa, the entire urethra to be more or less affected, and but a few drops

of discharge in the twenty-four hours to be secreted. The age of the patient, the number of times he has had the disease, the natural conformation of the penis, and above all the amount and extent of inflammation which accompanies this second stage, modify, if I may use the expression, the quantity of the discharge.

The color of the discharge is not invariably such as I have described. It occasionally happens that when the inflammatory symptoms are at their height, some of the minute blood-vessels of the corpus spongiosum give way, and, from the admixture of blood with the characteristic secretion of the disease, it assumes a brownish hue. The quantity of blood which, under such circumstances, escapes is exceedingly small, and appears to be afforded by the capillary veins engaged in the disease, and which, when relieved of their over distension, no longer bleed. That such is the source from which this discoloration of the specific discharge arises is evident from the fact of the discharge continuing for some hours of a brown color without the slightest appearance of red blood from the urethra; and, in further corroboration of this view, how often do we find, in this stage of the disease, from the mere introduction of the nozzle of a syringe, or from simply separating the lips of the urethra with our fingers, drops of pure blood, from the rupture of larger vessels intermixed with the discharges, but evidently forming no part of it, even the after stains on the linen, constantly exhibit distinct stains of blood and pus.

The cases I have just alluded to were both young men, nearly of the same age; in each it was a first gonorrhœa, and in each inflammatory symptoms were present. In one the discharge was profuse, yet the urethra was only affected for something more than two inches; in the other the entire urethra was hard to the touch and painful on pressure, yet the discharge was nothing like so great.

Now if you contrast these two cases with those of William H— and Thomas —, you will not only be furnished with examples of the second stage of gonorrhœa modified by age and by the number of times the individuals had the disease, but also with good examples even here of inflammation modifying the quantity of the discharge. Both these patients were old sufferers from gonorrhœa, each had had the disease three times; one was over forty years of age, the other had arrived at the mature age of fifty-three years. In neither did premonitory symptoms usher in the discharge; in the younger of the two the disease commenced five days after connection, but in the elder it did not make its appearance for nearly a fortnight after, and so mild were the inflammatory symptoms which supervened in this case, that the uneasiness he felt in making water could scarcely be considered as what has been termed "scalding." Here also the inflammation was slight and the extent of urethra affected was very limited, but the discharge was profuse; whereas in the case of Thomas —, the moment the urethra became extensively engaged, and the scalding and chordee excessive, the discharge was very trifling, until at length, from his own indiscretion, when the inflammatory symptoms were at their height, it ceased altogether, and an abscess formed in the perineum.

From the particulars of the cases I have read to

you, we also collect that the second stage of gonorrhœa may be preceded or followed by these inflammatory symptoms which produce chordee and scalding; and this fact is far from being uninteresting in a practical point of view, as our treatment of the disease should always be directed in this stage of the disease to the extent and amount of the inflammation, rather than to the amount of the discharge; yet you will constantly find patients, and sometimes practitioners neglecting the former in their anxiety to get rid of the latter, and exhausting their ingenuity in the diversification of their injections and in the different formulae of their specific balsamic emulsions. The great secret in the treatment of this stage of gonorrhœa is at once to combat all inflammatory action when present, to subdue it by proper means, and then to prescribe the appropriate remedies should the discharge continue, which will most likely prevent the disease from insensibly gliding into its third stage, and which it is so often permitted to do by neglect or mismanagement; a stage, I may here remark to you, which is the most troublesome to cure, and which, if it continues long, invariably lays the foundation of the most distressing sequelæ of gonorrhœa, and induces those sad mental reflections which have afforded so wide a field for the empiric to reap his filthy gains from.

When in this stage of gonorrhœa the inflammatory symptoms are at their height, it occasionally occurs that an effusion of serum takes place into the cellular tissue of the penis, the organ assumes a most unnatural size, and the fears of the patient are equally magnified. (Laughter.) But although this is at all times a disagreeable occurrence, yet there is no occasion of alarm on its account; it is only what occurs in inflammation in other parts of the body, where the part primarily affected is of a resisting kind. Thus, in a case of paronychia, which presented itself under Mr. Chance the other day, the inflammation was confined to the synovial theca of the fore finger, and the loose skin on the back of the hand was distended with serum to an enormous degree; the same thing occurs in inflammation in the vicinity of the eyelids, as we also had an opportunity of witnessing in the case of the little boy who had received a cut on the forehead three or four days previously, and which was rudely bound with adhesive plaster. In short, the occurrence is so common that I shall not further dwell upon it than to say, that the effusion in such cases can always be removed by a few punctures of the lancet or of a needle, and that we should never regard it except as a symptom of intense inflammation elsewhere.

It constantly happens, however, that the inflammation of the urethra is propagated by continuity to the glans, to the prepuce, and to the skin of the penis itself. Here there is true cause for anxiety; the skin of the penis assumes a red, dusky color; the organ itself is not so swollen as in the case of simple intercellular infiltration; it feels more solid, and has a doughy feel. Accompanying this condition of parts, the patient usually complains of much pain at the angle of reflection of the penis from the pubes; and when this symptom is pressing, our treatment should be most active, as it frequently happens that an abscess forms at this part, which, if not bounded by an adhesive cyst, too often extends beyond its original seat, and ultimately destroys the delicate subcutaneous

cellular tissue of the penis, producing the most irremediable results. The same thing happens occasionally in paronychia, when the cellular tissue and synovial apparatus of the fingers are destroyed, and their movements ever afterwards are greatly impeded, if not altogether lost. When chordee and scalding are most intense, the urethra sometimes, or rather its corpus spongiosum, becomes hard at different points, giving to the finger a sensation as if small, circumscribed abscesses were about to form along the canal. These are the result of inflammation of the corpus spongiosum—they are, in fact, deposits of lymph, and they often remain after the inflammatory symptoms of the disease have been subsided, producing, by their presence, that kind of chronic chordee to which Mr. Hunter applied the term "spasmodic." Of these I shall treat further when the third stage of the disease comes under our notice. All I wish to remark about them at present is, that they never, at least I have not seen them do so, terminate in abscesses, which open externally; they may, under certain circumstances, open into the urethra, but the evidence that they do so is at all times obscure. Besides the subcutaneous abscess of the penis which occasionally results from gonorrhœa, an abscess may form in the cellular tissue of the perineum—an occurrence which is at all times a source of anxiety to both the patient and his surgeon. In the case of Thomas—you had an opportunity of seeing such a consequence. That the swelling and ultimately the abscess in this case was confined to the cellular tissue of the perineum was, from its very commencement, beyond doubt. The only other affections it could have been confounded with were an abscess of one or both of Cowper's glands, or an urinary abscess, as it is called. Its situation, which was in the mesial line, and which corresponded to the bulb of the urethra, together with the absence of deep-seated acute pain, forbid the idea that it was the former; and its regular slow growth and development, its being unaffected at any time by the flow of urine from the bladder, and the disappearance of the discharge from the urethra on its supervention, made it equally certain that it was not the latter.

As I have not yet spoken of the treatment of this stage of gonorrhœa, and as the consideration of the other affections of distant organs which occasionally occur in connection with gonorrhœa, such as inflammation of the testicle, of Cowper's glands, and those I have already alluded to, require not to be passed over in a cursory manner, I shall now speak of the different remedies we can safely resort to in our treatment of the second stage of the disease, reserving for a future lecture the description and treatment of the diseases of other parts, which occasionally become involved, as well as of the other discharges which resemble that I have been just considering.

Our great object in the treatment of this stage of gonorrhœa should be, first, to combat the inflammatory symptoms. For this purpose we are fortunately furnished with a variety of those remedies to which the term antiphlogistic has been applied, and at the head of these stands bleeding. In the severest forms of the disease, and particularly if the patient be of a robust constitution, a vein in the arm should be opened and a full bleeding be had; this should be repeated if necessary, and in conjunction with the warm bath.

It is seldom, however, that patients, unless they suffer very severely, will submit to this treatment; and it is, moreover, fortunate that the disease does not very frequently require it. Next to this method of taking blood, that by opening the dorsal vein of the penis is decidedly the best; and, indeed, when the vessel is large and affords a quantity of blood, to the amount of eight or ten ounces for instance, it is always preferable. Leeches stand next in value, and should not, when resorted to, be applied sparingly. As the opening of the dorsal vein of the penis is a practice which, for all I know, has originated with myself, I shall make a few observations on the operation. The late Sir Astley Cooper strongly advocated, in his lectures, the practice of opening the veins of the scrotum in gonorrhœal testitis, and more especially where the locality of the patient did not allow him to apply leeches. The advantage which attended this method of taking blood has induced it to be constantly had recourse to; and in my own practice I have adopted it frequently, where the application of leeches could not conveniently have been effected; for I believe the latter method of taking blood in this disease from the inflamed parts to be the better of the two, at least I have found it to be so. The hint given by the practice I have mentioned first led me to open the dorsal vein, having previously satisfied myself of the free and large communications which exist between its trunk and the corpus spongiosum urethræ, through the communicating lateral venous branches, an account of which I gave in a former lecture. The only argument I ever as yet heard offered against this practice was that phlebitis might intervene. As yet, and I suppose I have opened this vessel sixty times in this institution, I never saw any such effect; and now I shall state to you my reasons why I think phlebitis is most unlikely to follow.

In the first place this disease almost invariably is the consequence of ligatures applied to veins, of complete division of veins, or of wounds of veins, produced by blunt or dirty instruments; in the former case, for instance, a wound of the femoral vein, in attempting to pass the aneurism needle round the artery, affords an example in the latter—the performing venesection with a dirty or rusted lancet. The size of the vein, and probably, also, the thickness of its coats, and certainly if it should be diseased, also appear to predispose to it, and besides these the state of the patient's constitution.

Now, as regards the vena magna penis, there is, probably, no vein in the body less likely to be attacked with phlebitis. It is not a large vein in comparison with those others which we daily open; its coats are thin, even to transparency; it is most superficially covered, and there is no fear of injuring any nerve, as is the case when venesection is performed at the bend of the arm. When opened properly it yields blood freely; no vein in the body heals more readily after an incision is made in it, in proof of which patients have had erections of the penis at night, the vein having been opened at two o'clock of the same day and no secondary bleeding has taken place.

There is no doubt whatever that taking blood from this vessel is the most effectual remedy we possess for chordee; in scalding it has not answered so effectually; but I have witnessed innumerable instances of chordee

having been at once cured by a plentiful bleeding in this manner, and you have had, also, many opportunities of seeing the same effect.

In performing the operation you should use a lancet perfectly clean and with a broad shoulder; the penis should be taken in the left hand, and its dorsum pressed against its angle of reflection at the pubis, which answers the effect of a bandage and distends the vein. The vessel should now be opened in its long axis, having previously made the integuments moderately tense over it, without displacing them, especially to either side. If these particulars are not attended to, some of the blood will immediately become effused into the cellular tissue, and our operation will fail. If the dorsal vein be not of its usual size it is better not to perform the operation, but to resort to leeches. After the sufficient quantity of blood is taken, a small dossil of lint should be placed on the orifice, and retained there by adhesive plaster for a few hours. The dorsal vein very often does not pursue its accustomed route, but is for a considerable way on the under surface of the penis, on either side of the urethra, and enters the pelvis laterally. I have, also, occasionally seen four or five small radicles of veins run variously along the penis, without uniting to form a large trunk. All these deviations it is as well to be aware of; but in any of them, if there be a large trunk, you may safely open it. In that part of the venous system which is subcutaneous, the vessels, as you are aware, never obey the same anatomical disposition in any two individuals, and in like manner the veins of the penis—the superficial veins—suffer the same irregularities. Next to blood-letting, either generally or topically, as a means to subdue the inflammatory symptoms of gonorrhœa, stands the internal administration of tartar emetic and sulphate of magnesia in the form of mixture. I know of no medicine, or rather combination of medicines, which acts more energetically. The proportion I administered this mixture is the following:—

Sulphate of magnesia, five drachms;
Potassio-tartrate of antimony, three grains;
Water, eight ounces. Mix.

Two tablespoonfuls to be taken every third or fourth hour. The first dose of the medicine generally vomits or produces nausea, and the subsequent ones affect the bowels. It occasionally happens that it determines altogether to the bowels, and produces more evacuations than are desired; in such a case its exhibition should be suspended, or the sulphate of magnesia may be omitted altogether, and the tartar emetic, combined with some preparation of opium, be persevered in. When the mixture produces vomiting by its first dose, and by its subsequent ones keeps up nausea, it should still be persevered in, at least for a day or two, and the most decided effects on the inflammatory symptoms will be the result. In my practice here the patients constantly are provided with a sufficient quantity of this mixture to last them three days, and, on their return, the usual answers to my inquiries are—that it did them much good, and that they were certain it would have done them more, in their own words, “could I have kept it on my stomach!” (Laughter.) Probably not the least recommendation of this mixture is that it prevents patients indulging in those excesses of eating and

drinking, and which are so inimical to the subduing of inflammation in any part of the body; at all events, I give you my experience in the medicine as afforded in this institution, and I believe its beneficial effects in the first instance are attributable to the control it exercises over the circulation, and in the next to the disinclination it induces to indulgences, particularly in spirituous liquors, for I need scarcely tell you that a patient with half a grain of tartar emetic in his stomach every third hour will have little inclination either to eat heartily or indulge largely in convivial potations. (Laughter.) I shall not occupy more time in speaking of the other medicines which subdue or control the inflammation of gonorrhœa by determining to the skin or to the gastro-intestinal mucous membrane, but I think it right to caution you against administering, in any stage of the disease, those medicines to which the term drastic has been applied; these only tend to aggravate all the symptoms, and yet how constantly do we find patients applying here in the worst condition, who have been daily purged over and over again with pills at night and draught in the morning, *ad nauseam*. Diuretic medicines have also had their advocates in this second stage of gonorrhœa. For my own part, I have little confidence in their utility; they are, I believe, generally given with a view of increasing the quantity of urine, and thus are supposed to diminish its irritating properties by producing a more abundant secretion of its watery constituent. In any stage of gonorrhœa the less calls there are upon the bladder to evacuate its contents the better; a frequent desire to make water is in itself an evidence of the irritability of the parts affected principally in gonorrhœa, propagated by sympathy to distant organs. By all means you should endeavour to subdue this state of parts not by giving your patient large quantities of fluids and diuretic medicines, but those remedies which have a tendency to allay irritation in the urinary apparatus when the calls to micturate naturally occur. As good a medicine as you can give for such purpose is a combination mixture of acacia, camphor mixture, and tincture of opium. Sometimes the acacia mixture alone is sufficient to answer the end we have in view. I need scarcely remark to you that if the patient can observe strict rest, the better; but if not, as is too often the case, we should instruct him to prevent the penis from hanging pendulous when pursuing his ordinary avocations; your ingenuity will at once suggest means to accomplish this end.

I have but one other remark, Gentlemen, to make connected with treatment of the inflammatory symptoms of gonorrhœa, and though last it is not the least; allude to water dressing. A single fold of lint saturated with tepid water should be folded round the penis but so applied as not to cover the extremity of the organ; this should be retained in its place by an oil silk covering, applied loosely but so completely as to prevent evaporation. This dressing should be changed three or four times a-day, according to circumstance. It is a neat and cleanly apparatus, and answers all the purposes we could expect from a poultice without its weight and inconvenience.

A consideration of the specific remedies, as they have been called, for gonorrhœa, I shall commence in the next lecture with.

PARALYSIS OF THE ŒSOPHAGUS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Having read with much interest, in the Journal of the 11th inst., an account of a case of stricture of the œsophagus occurring in the practice of Dr. Shearman, of Rotherham, and as a somewhat similar case has occurred under my own observation, I beg to forward some details of it for publication, should you think them worthy of a place in your valuable Journal.

I remain, Gentlemen,

Yours, &c.,

JOHN BUCK.

Leicester, March 15, 1843.

On the 19th ult. I was called to see Donald McDonald, a cotton-printer, who was said to have been seized with a paralytic stroke. I found my patient in one of the low lodging-houses of this town. He is forty-two years of age, and gave the following account of himself:—He said that he had been out of employment some time; that he had on that day walked some ten or fifteen miles, seeking employment, and for several days he had tasted nothing but bread and water. His mouth was much drawn to the left side; there was complete loss of motion, and some loss of sensation, on the right side of the body; the surface of the body was cold; the pulse 96, feeble, and intermittent. Some quickly-acting purgatives were ordered, with mustard cataplasms, to both right extremities.

On the following morning, the 20th, his symptoms were much altered; the regularity of the features was restored; the loss of sensation and motion became more general, but still was more observable on the right than on the left side; he talked more fluently this morning, and complained of a feeling of constriction in the region of the throat, and of an inability to swallow; his vision was impaired—he saw all objects double; he was much excited, and the inaptitude for swallowing gave a most interesting feature to his condition. Upon his attempting to swallow even a drop of water, the most violent convulsive action was induced, together with prolonged fits of coughing. Although entreated to be quiet he persisted in repeating his fruitless attempts at deglutition. The secretions were all in a tolerably natural state.

21. His incapability of swallowing continues, and he is getting a little exhausted. In this state he was seen by an experienced practitioner of this place, Mr. Macaulay, and at his direction I introduced into our patient's stomach large quantities of nutritious fluids by means of the common stomach-pump. The case went on with little or no alteration of symptoms for three or four days. The feeding system was, of course, continued night and morning.

25. Some slight amelioration has taken place; McDonald is now able to swallow small quantities of fluids immediately after the withdrawal of the injecting-tube from the œsophagus. The paralytic symptoms did not again assume a very defined form, but kept hovering about our poor patient. Mercury, from its well-known power over some of the slighter forms of paralysis occurring in persons of middle

age, was now prescribed, and he commenced taking the pil. hydrargyri in doses of five grains night and morning.

28. He can now swallow small quantities of gruel and porridge; stomach pump introduced but once to-day; appears to be improving.

March 3. The loss of sensation and motion has again become fixed, as it were, to the right side, and he is unable to stand. I recommended his removal to the infirmary of the Leicester Union House; and this was accomplished some few days afterwards, and he was immediately put upon full diet.

10. He has much improved, and can now swallow all well-masticated substances; he can walk three or four paces; and, as symptoms of approaching salivation were observable, he was ordered to discontinue the mercury.

15. He can now walk quite firmly, and will, I trust, soon be discharged from the infirmary.

I have copied the above case from my note-book; and as I had not the remotest idea of placing it before the medical public, at the time of its occurrence, I have neglected to enter many important details in the manner which Dr. Shearman has done. In McDonald's case there is much similarity in important features to Miss Cooper's, the difference, however, being in my patient's favor, both as regards age and prostration of strength, which latter symptom appears to have been most formidable in Miss Cooper's case. The administration of mercury was here followed by such marked benefit as would, I think, induce most of your readers to employ it in similar cases.

CALCULI IN THE APPENDIX VERMIFORMIS CÆCI.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Should you consider the accompanying case of sufficient interest, I shall feel obliged by your inserting it in your Journal.

I am, Gentlemen,

Your obedient Servant,

F. J. BUTLER, Surgeon.

Winchester, March, 1843.

Master W., aged eight, is a child of spare habit and delicate constitution, but in the usual enjoyment of good health. On Wednesday, the 8th of February, he complained of feeling rather unwell, but not sufficiently to prevent him playing about as usual; on Friday, as this feeling had slightly increased, a little aperient medicine was given, which acted freely, but without relieving the ailment; and, on Saturday, being seized with sickness, &c., I was requested to see him, and found him suffering from frequent bilious vomiting; great thirst; considerable heat of skin; frequent, but soft and compressible pulse; pain in the right thigh and groin, increased upon pressure; and slight tenderness of the abdomen. A calomel purge, with effervescent saline medicine, was given, and fomentations were directed to be applied to the thigh and abdomen.

12. Has passed a restless night, the pain in the thigh and groin being rather increased; no relief from the bowels; the sickness and all the other symptoms

are much lessened; tenderness of the abdomen very slight. Ordered a warm bath;

Scammony, two grains;

Calomel, one grain. A pill to be taken every second hour.

13. Has had a more comfortable night; pain in the thigh and groin lessened; heat of skin subsided; pulse 98, soft, and rather feeble; thirst considerable; no return of sickness; bowels not acted upon. To have a common enema at once; five grains of purgative pill every second hour.

14. Ten, a.m. Slept but little; abdomen more tender upon pressure, and somewhat distended; countenance anxious; pulse quick, small, and weak; pain in groin and thigh much the same; no relief from bowels. Cathartic mixture, one ounce, every second hour until the bowels are well opened; a blister to the abdomen.

Five, p.m. The bowels have been freely relieved; the tenderness and tension of the abdomen is greatly lessened; pulse much the same; in every other respect improved. Arrow-root with brandy.

15. After the last visit considerable and rather sudden prostration came on, the pulse being quick, small, and very feeble; countenance much more anxious; abdomen a good deal distended; skin bedewed with a clammy perspiration, which, with the other symptoms, led to the supposition that some intestinal lesion had taken place. Ammonia, &c., was given constantly.

Nine, p.m. Has rallied considerably since the afternoon, but the skin is still covered with perspiration, and all pain and tenderness has subsided, indicating a speedy dissolution; is perfectly sensible.

16. He slept the greater part of the night, and expired about nine o'clock, a.m., without a sigh, remaining quite sensible till the last moment.

At the request of the family of the little sufferer, a post-mortem examination was made, thirty hours after death, in the presence of my friend and partner, Mr. Wickham, with whom I attended the case, the result of which was as follows:—Abdomen a good deal distended; upon removing the parietes the contents presented a mass of inflammation, the whole being glued firmly together, in their natural position, by layers of half-organised lymph, whilst the viscera were much reddened and injected, especially in the right iliac fossa, where a portion of intestine of much darker hue than the rest quickly attracted our notice. Upon further examination, this proved to be the appendix vermiformis cæci, which was much enlarged and thickened, being larger than the little finger; and in its upper half were two circular perforating ulcers, close together, with rounded edges, through which had escaped two small bodies about the size of large peas, of a light brown color, and rather nodulated surface, which proved to be calculi, and corresponded with one other which remained within the appendix. In the immediate neighbourhood of the appendix, but perfectly distinct from it, in the root of the mesentery, was situated a small abscess; whilst the cavity of the abdomen contained about two pints of very offensive purulent matter, with flakes of lymph floating in it. No other calculi were discovered in the intestinal canal or gall bladder.

REMARKS.

The symptoms displayed in the progress of the above case cannot, I think, but create surprise when considered with reference to the unhappy result, inasmuch as the evidence was rather in favor of disordered function than of such severe organic disease as was proved by the post-mortem examination, though I suppose this might in great measure depend upon the delicate habit and feeble powers of the little sufferer; for it does not appear probable to me that such extensive disease, set up by the calculi, could have been limited to the short period of his acknowledged illness, but must have existed, to a considerable extent, some time prior to his first complaint, yet without interfering with his ordinary amusements and feelings.

It is no uncommon circumstance to hear of extraneous bodies, such as cherry and tamarind stones, finding their way into the appendix vermiformis; but there appear to be very few recorded cases of *calculi* being found in the same situation. The only instances I have met with are two mentioned by Dr. Copland; one by Ruysch, and one related by Mr. Wickham, in the 3rd vol. of Macleod's "London Medical Journal," in neither of which, except the latter, is one able to gather the probable source from which the calculi were derived, no analysis being given.

The question, therefore, naturally arises whether the calculi found in this case are of biliary or intestinal formation; and if the latter, in what part of the canal they were formed? The first is decided by the analysis, as not a particle of biliary matter could be detected in this or in Mr. Wickham's case, the analysis being as follows:—

Inspissated mucus,
Fatty matter, and
Oxalate of lime, in small proportion.

Mr. Wickham's.

Inspissated mucus,
Fatty matter,
Sub-phosphate of lime,
Oxalate of lime.

The next question is more difficult to decide; but from the numbers (three in one case, and two in the other) I am disposed to conclude that they were formed within the appendix itself; for though it is very easy to suppose that *one* might accidentally find its way into that situation, it requires some stretch of the imagination to believe that *three* would take the same course, without similar bodies being detected in other parts of the intestines, or in the evacuations. Nor is there any reason to suppose that the appendix, apparently of the same structure as the intestines, is not equally capable of producing from its own secretions similar formations; besides which the natural secretion of this part is acid, whilst that of the small intestines is alkaline; hence, probably, the remarkable constituent, oxalic acid, in both calculi, the presence of which it is else very difficult to account for, and from which my belief is greatly strengthened, that this obscure little process performs some very important functions in the animal œconomy.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, MARCH 25, 1843.

We are glad to find that the members of the medical profession are, at length, becoming awake to the false position in which they are likely to be placed by the proceedings of the Home Secretary with respect to the question of medical reform.

The following address has been circulated for signature among the medical practitioners residing in the county of Surrey, and a public meeting was to take place yesterday to consider what further steps might be necessary :—

“ To the Right Honorable Sir James Graham, Bart.

The undersigned medical practitioners, residing in the county of Surrey, understanding that it is your intention to carry into effect certain reforms in the constitution of the College of Physicians and of the College of Surgeons, and then to introduce a bill to effect reforms in the medical profession generally,

Beg leave respectfully, but earnestly, to request that an inquiry be made into the state of the medical profession generally, previously to the contemplated reforms in the constitution of the Colleges of Physicians and Surgeons, from the conviction which we entertain that such inquiry would influence the Government in regard to their adoption.”

The terms of this address are exactly such as the circumstances of the case require. Without any unnecessary attempt to dictate to the Government by urging plans of speculative reform, or attacking existing institutions, the practitioners of Surrey content themselves with making the very reasonable request that the state of the whole profession should be considered previously to the adoption of any measures for amending or altering the constitution of any portion of it. This is precisely the course which has been hitherto acted upon by the Provincial Association, and which we earnestly recommend to be followed in other counties, and in all the larger towns, as that most likely to attain the objects which the rational and sound-thinking of all classes have in view. It is, moreover, the same course as that which, we have reason of belief, induced the Government to pause when they announced a similar intention during the last session of Parliament.

We understand that it has been recommended to the branch associations to send up addresses drawn up upon the same plan. A general one, to the same effect, though embodying a more detailed expression of the principles upon which any reform of the profession, to prove satisfactory to its members, must be grounded, was forwarded, by the council of the association, to Sir James Graham as soon as his intention became known to them.

The uncertain and unsatisfactory position in which we are placed by the vacillating conduct of the Home Secretary, the intrigues of certain corporate bodies, and the want of energetic action on the part of the profession, has stimulated Sir James Clark again to come forward in the field of medical reform.

Did we experience any slackening of our own zeal—any misgivings of ultimate success—any hesitation as to the path which ought to be pursued, the well-timed, temperate, and disinterested exhortations of Sir James Clark were more than sufficient to dissipate all doubt, and to cheer us with the assurance that a cause supported by a man of such exalted station, and so distinguished professional eminence, must succeed. The object of Sir James Clark's present pamphlet, which, like its predecessor, is addressed to Sir James Graham, is to urge on the Home Secretary the necessity of framing any legislative enactment for the regulation of the profession, in such a manner as to secure for all who shall be permitted to engage in the practice of medicine, *a good education*. This is the most important point in medical reform, although it is one which has been much neglected in the heat of discussion and the strife for privileges. We shall, therefore, follow the judicious remarks of Sir James Clark, and make no excuse for laying before our readers the observations of one who has thought deeply on this subject, and, despite all personal considerations, has come forward to advocate the true interests of our profession.

The foundation of medical reform must, in Sir James Clark's view, he laid on a good and uniform scheme of medical education for the general practitioner. To understand the necessity of fixing some uniform standard of education throughout the kingdom, we have merely to compare the present condition of the medical profession with that which existed some fifty years ago. There are now, as formerly there were, three classes of medical practitioners in this country—physicians, surgeons, and apothecaries. The education of each class has made considerable progress within the last half century; but the acquirements of the apothecary have increased in a much greater ratio than that of the other two classes. Instead of being the humble and subservient attendant on the physician—to administer a bolus or a clyster—puzzle himself with decyphering impure Latin, or with vain efforts to compound incompatibles—the apothecary has been converted into the general practitioner, a man of good professional education, accustomed to act independently, and entrusted with the health and lives of the great bulk of the community. The general practitioner has, in fact, as the name implies, supplanted both physician and surgeon in most of the large towns, and in all rural districts; he is qualified, as an apothecary, to practise medicine; he has qualified himself to act either as surgeon or as accou-

cheur; and the consequence is, that as his professional acquirements have been increased to meet the wants of the public, the general practitioner occupies the highest walk of professional eminence in every quarter of the land. On the other hand, the surgeons, encroached upon and supplanted by the general practitioners, have discovered (practically at least) that physic is a part of surgery, and devote themselves, most industriously, to hunting out and treating cases, which, at one time, were supposed to be the peculiar province of the physician.

From this brief sketch it is evident that, in practice, the three classes of the profession are virtually confounded into one; the physician does not turn up his nose at any surgical case which he can conveniently manage; the major part of a pure surgeon's practice is medical, while the apothecary openly and of right takes everything that he can lay his hands upon. The inference, then, is unavoidable: if the professional duties of the three classes be essentially the same, and if little or no distinction be observed in the actual performance of these duties, the medical education of the three classes, up to a certain point, should be the same; the physician should not be allowed to vaunt his ignorance of surgery, nor the surgeon to undertake the treatment of the most delicate medical cases, in profound ignorance of internal pathology. The state, in a word, should prescribe one course of medical education for all who enter the profession; this course should comprehend every thing that is necessary for the general practitioner to know, and it should be the same throughout the empire. Beyond this—beyond the requirements necessary to obtain a license which would entitle the possessor to practise any and every branch of his profession—the legislature, in Sir James Clark's view, need not to interfere. The regulations respecting honorary degrees in medicine may be safely left to the universities and colleges.

As we have already stated, the professional education of the general practitioner requires little improvement, but it cannot be denied that many deficiencies exist in the *preliminary* part—in those departments of science, a knowledge of which is necessary to prepare him for entering on his more strictly professional studies. To this point the attention of the legislature should be earnestly directed. The objections which may be urged against interfering with the preliminary instruction of the general practitioner, are stated by Sir James Clark to be—"1st, The difficulty of attaining it; 2nd, want of means and time on the part of the student; 3rd, the possible effects on the due supply of medical practitioners; and 4th, the suspicion that men so educated would not undertake the drudgery of attending the poor."

The first objection has little weight; there is no town of any consequence in the kingdom which is not abundantly supplied with the means of affording a

much greater amount of instruction than is contemplated.

The second objection is inadmissible; if the student do not possess a certain amount of means, he had far better adopt some profession more suited to his circumstances; he will only entail on himself an insufferable weight of misery in the struggle against poverty and its attendant humiliations. To the third objection Sir James Clark replies, that even if the proposed measures had the effect of somewhat thinning the ranks of the profession, good, not evil, would ensue; and in this sentiment we cordially concur. With respect to the remaining objection, that well-educated young men would not submit to the drudgery of attending the poor, it may be replied, that they do submit to it now, and that it will be full time to legislate for such a case when it occurs.

The exact amount of preliminary knowledge which should be required from the candidate, Sir James Clark does not profess to define, but general principles are easily laid down: thus, a certain acquaintance with the classics is necessary to enable him to read professional works and understand professional terms—many of the German standard works are written in Latin. The student must also be familiar with the elements of arithmetic and geometry; the principles of physics and natural philosophy, botany, and chemistry; in short, a certain amount of knowledge in all branches of natural history is indispensably requisite, and this knowledge, so far as it goes, should be sound—not a parrot-like smattering, but a solid understanding of each subject, so far as it may be deemed expedient that it shall be pursued. A point connected with this branch of the subject, on which Sir James Clark insists, is that the preliminary instruction of the student should be acquired and tested before the period of commencing his strictly professional studies; this is the more necessary at the present day when such a tendency exists to hurry students, by artificial means and in the shortest possible time, through the period of their medical education.

The main point, then, which Sir James Clark earnestly urges on the attention of her Majesty's government is, the necessity of providing a solid and efficient education, both preliminary and professional, for all persons who propose to assume the responsible duties of a medical practitioner. The effect of such a measure would undoubtedly be to raise the character of the profession to the position which it is entitled to occupy in public estimation, to remove many of the causes of discord which now distract our ranks, and invest the whole profession with a degree of moral influence, for which we shall look in vain under other circumstances.

"When the standard of medical education (says Sir James Clark) has been raised to what it ought to

be, the next point for decision will be the formation of a body to whom is to be delegated the power of carrying out the principles of education laid down by the government."

The body to whom so delicate a task is to be entrusted should be an independent one, unconnected with schools or corporations; responsible to government for its acts, and not diverted, by collateral interests, from carrying out, in the fullest manner, the principles of education embodied in the legislative enactment. Finally, Sir James Clark, in common with many other high authorities, is of opinion that the practice of pharmacy should be separated from the practice of medicine—that the science should be divorced from the trade.

We have thus, in a very brief space, endeavoured to convey to our readers an idea of the chief points which are forcibly, but temperately, urged by Sir James Clark on the attention of her Majesty's government. The influence of Sir James Clark has been again seasonably exerted in favour of medical reform, and whatever fate attends his efforts, he has entailed upon us a debt of the deepest gratitude for his noble and disinterested advocacy of our cause.

Dr. Green regrets to say, that the state of his health compels him to retire, for some time, from taking an active part in the direction of this Journal.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

February 28, 1843.

The PRESIDENT in the Chair.

Remarks on the Calculi in St. George's Hospital.
By DR. BENGE JONES. [Communicated by Mr. C. HAWKINS.]

The number of specimens submitted to examination was 233. The author's object, from the analysis of these calculi, is to arrive at conclusions with regard to the comparative frequency of different states of the urine in calculous complaints, and thus to obtain practical hints as to the efficacy of remedies intended to alter the secretion, or act upon the stone in the bladder. He presents several tables; and taking 450 states of the urine, inferred from the composition of the calculi, finds that, in 139, it was alkaline, and in 311 acid, to test paper. Omitting from the latter list 59 specimens of oxalate of lime, 252 cases of the uric acid diathesis remain; and in 117 of these no free acid was passed, from which the author concludes that alkalies would have been of no benefit to them, so far as neutralising acidity of the urine was concerned. Taking the cases in which the alkaline concretions prevailed, he infers that in 52 the calculus might have been lessened by the injection of dilute acids; and in 12 the whole calculus might have been removed; while in others, to which he refers, disintegration might have been effected. He concludes by describing a calculus in Mr. Caesar Hawkins' pos-

session, the nucleus of which consists of cystine, and which, from the history, appears to have been formed when the patient was two years and a half of age.

ACADEMY OF MEDICINE, PARIS.

March 7, 1843.

RECTAL POLYPI IN CHILDREN.

M. Hervez de Chegoin read a report on a memoir by M. Gigon on this subject.

According to the author, polypi of the rectum occur not unfrequently in children. In character they differ from the polypi of other mucous membranes; they are not covered by epithelium and the pedicle is very small. The author distinguishes these polypi into three species—viz, the mucous, vegetating, and fleshy; he does not think that habitual prolapsus of the gut is a predisposing cause, for they often occur in strong children, whereas prolapsus usually happens in weakly children. The author saw a case in which the removal of one of these polypi was attended by very troublesome hæmorrhage.

CANCER OF INTESTINE.

M. Raybard, of Lyons, read the history of a case of cancer affecting the sigmoid flexure of the colon; the tumor and portion of intestine attached to it were removed, the two ends of the intestine were then brought together, and the patient recovered.

URETHROPLASTY.

M. Ricord presented a patient on whom he had recently operated for loss of the urethra. The canal had been completely destroyed in its spongy portion by phagedenic chancre; the greater portion of the skin of the penis had also been destroyed by the same sore, and two thirds of the circumference of the corpora cavernosa as well as the sulcus, indicating the original seat of the urethra, were covered by a thin cicatrix; the urine escaped through an opening in a fold of integument over the scrotum. To remedy this state of things, M. Ricord endeavoured to form a new urethra between the corpora cavernosa and the tissue of the cicatrix. For this purpose he passed a peculiar shaped trochar into the meatus urinarius, and pushed it backwards in the direction of the original urethra and above the cicatrix, until it met a gorget, which had been passed a few lines into and beyond the orifice through which the urine flowed. A silver canula was now introduced through the artificial canal, and allowed to remain in for two hours, when the urine passed freely through the new channel. The penis was enveloped in lint moistened with cold water; there was little tumefaction or inflammation. On the fifth day the canula was replaced by an elastic bougie, and since the 27th of January (the day on which the operation was performed) the size of the bougies has been gradually increased, so as to give a proper diameter to the new canal.

SURREY COUNTY GAOL.

Mr. Meymott, of Stamford-street, has been elected surgeon to this gaol; the number of candidates was twenty-two.

PELVIO TOMY.

In the year 1832, Dr. Galbiati proposed the performance of an operation to avoid the necessity of the Cæsarian section, which has so often proved fatal to the mother. The proceeding consists in the section of the bones of the pelvis in three places in cases of moderate narrowness thereof, and in five where there is a considerable diminution of its capacity—viz., the two rami of the pubes, the rami of the ischia, and the symphysis pubis. This operation, to which the name of pelviotomy has been given, has been performed lately at the Hospital of Incurables, by Dr. Ippolito Nunzianti, upon a woman twenty-three years of age, the subject of rachitis, and who had gone the full period of pregnancy. The waters had come away three days previously; the sacro-pubic diameter, at the commencement of the pelvis, was about three inches, as ascertained by Baudelocque's pelvimeter, but, on examining the hollow, the base of the sacrum was found to be much inclined to the left, so that there was scarcely an inch distance between it and the corresponding ilio-pectineal eminence, rendering the left side of the pelvis completely useless for the purpose of parturition. The presentation was natural, and the os uteri not dilated sufficiently to allow of the passage of a finger, notwithstanding which, and against the advice of Dr. Galbiati, who was present, and desired that the operation of version or the application of the forceps should be had recourse to when the dilatation should be complete, pelviotomy was decided on and performed, the proceeding requiring some time, in consequence of the thickness of the ascending rami of the ischia. The patient was put into a warm bath when the operation was concluded, and the next day, labor-pains having been re-excited by the *secale cornutum*, she was delivered of a well-formed child, which was evidently living until it arrived at the perineum, but having been retained there some time, was born asphyxiated, and could not be restored. Fever set in, with pain in the abdomen, which gradually increased in severity, the lochia becoming fetid, and in spite of baths, leeches, cupping, &c., the patient died eight days after the operation. On examination of the body, ecchymoses were found on the external and peritoneal surface of the uterus, corresponding to the wound of the pubis; and there was some redness with a little pus, near the round ligament of the right side, just as it is leaving the ring. The peritoneum was more red than usual; the internal surface of the uterus appeared, as it were, gangrenous, its parenchyma was healthy, but hyperemic. There was also a slight purulent infiltration in the iliac fossa.—*Filiatre Sebezio*.

STAPHYLOPHARY.

The "Dublin Journal of Medical Science," for January last, contains an account of three cases, in which the operation for uniting the cleft soft palate was performed successfully. The operator in the first case was Dr. Cusack, surgeon to Stevens' Hospital, in the two others Sir P. Crampton. Dr. Cusack's patient was a medical student, eighteen years of age, suffering under a congenital fissure of the soft palate. At some time previous to the operation he was directed to employ measures to diminish the irritability of the fauces, the existence of which constitutes one of

the principal difficulties, and in the removal of which he was perfectly successful.

Dr. Cusack proceeded as follows:—With the aid of a simple forceps and curved needles, three ligatures were passed at equal distances from each other through the soft palate, the lowest being at the base of the uvula; a double-edged knife was then introduced about a line from the margin of the cleft, and the same distance from the apex of the triangle, on each side in succession, the incisions being terminated above. After the lapse of a short time, during which the patient took some light nourishment, the edges of the wound were approximated, and the ligatures tied with a surgical knot; one of them, however, having been cut, as it was supposed, too closely, unravelled, and was replaced. Some slight hæmorrhage followed, with teasing cough, and a few hours after the operation all the ligatures had become unravelled, and were, of necessity, replaced by two others at points more remote from the margins of the fissure. They were each secured by a simple knot. No untoward symptoms occurred afterwards, and on the fifth day the ligatures were cut, the palate being perfect, the only remaining defect being a bifid uvula, a condition commonly met with in persons who articulate with perfect distinctness.

Sir Philip Crampton's patients were a boy of twelve years of age and a young lady aged sixteen. The peculiarity in the treatment of these cases consisted, first, in the manner of securing the ligature; and secondly, in the management of the patient after the operation. The difficulty of tying the second knot on the ligature, without suffering the first to become opened by the strong retraction of the edges of the fissure effected by the muscles of the palate, has always been acknowledged. This difficulty, however, was effectually removed by an ingenious contrivance of Mr. Maclean's; after the ligatures had been passed through the palate at the distance of a quarter of an inch from the cut edge of the fissure, and brought out at the mouth, their ends were passed through a small perforated metallic bead, such as are used in making purses; the bead was then pushed down along the ligatures, closing them as it descended, until it touched the approximated edges of the wound; it was then compressed with a pair of strong, blunt-pointed forceps, and the ligatures were thus firmly secured without a knot at the required degree of tension. The other and most important peculiarity in the treatment consisted in allowing the patients an ample supply of soft food during the whole period of the treatment. Boiled bread and milk, custard, soup, and jelly, were given twice or thrice a-day, and the patients were not confined to their beds, Sir Philip Crampton conceiving that the total privation of all nourishment for five days, so strongly insisted on by Roux, was not only unnecessary, but in the highest degree unfavorable to the successful issue of the operation, as it must cause a state of constitutional disturbance highly unfavorable to the establishing of the healthy process of union by the first intention, in proof of which the observations of Messrs. Manoury and Thore, house pupils at the Hotel-Dieu, where Roux's operations were performed, are quoted; they state that they have seen delirium and severe nervous derangement follow such protracted abstinence from food.

RETROSPECT OF THE MEDICAL SCIENCES.

TUMOR OF THE EAR.

M. Cassy has published in the "Archives de Médecine" the particulars of a sanguineous tumor of the ear occurring in lunatics, and, as he believes, in them only, three cases of which he has noticed in the practice of M. Leuret. The complaint is not very common. Two of the patients were affected with mania only, and were perfectly free from any symptom of paralysis. The tumor in each case was limited above and laterally by the furrow of the helix, while below and anteriorly it terminated suddenly near the meatus, filling up the whole cavity of the concha. Its color was a blueish black, and there was an obscure sensation of fluctuation in its centre. Pressure did not leave any mark, and only slightly and for the moment diminished the intensity of the dark color. All the other parts of the ear were slightly thickened, swelled, and somewhat changed in color, with increase of heat and sensibility. The part affected was also the seat of pain, as far as could be judged. The hearing and general health were unaffected. Superficial punctures gave issue to a red fluid blood, at first abundantly, but which soon ceased to flow; the instrument being plunged more deeply, gave the sensation of a resistance which had been overcome, and, as soon as it was withdrawn, a viscid, sanguinolent, inodorous serosity escaped to the extent of a small spoonful, and by pressure a black, coagulated blood, resembling jelly, was evacuated. In the third case, a square-shaped lamella of a yellowish white color, friable, and without traces of organisation, appearing like a portion of recently-formed false membrane, also came away. A probe introduced into the opening reached the cartilage of the ear, which gave a feeling of inequality to the touch. The next day, the lips of the wound having united, and the tumor become as large as before, a fresh incision was made, and a black liquid blood without clots or any particular odor evacuated. This was done almost every day for a fortnight, when the swelling began to disappear, and the violet livid hue of the part to diminish gradually. The cure in each case was complete in from three weeks to a month, there remaining afterwards a little thickening only of the seat of the disease, and the cicatrices of the numerous incisions that had been made.

One of these patients having died within a short period, an examination was made of the diseased ear, when there were found two cartilaginous layers, with a space between them containing a reddish and fibrous tissue. M. Cassy does not believe the most ready and feasible explanation of this state—viz., an effusion between the layers of the cartilage of the ear, but appears to consider that a new cartilage had been formed in the part, from the false membrane lining the hæmorrhagic cavity.

PILULE HYDRARG. CUM FERRO.

Dr. G. F. Collier recommends a compound of the sesquioxide of iron and mercury, as preferable to the ordinary blue pill of the pharmacopœia. Its advantages he states are as follows:—It is made in five minutes, the ordinary blue pill requiring a week (in reality, many hours, not days). The globules are not visible, even by the microscope; it is uniform in its

appearance and effects; it makes a smoother pill, retaining its form more permanently; it salivates in a few days in the usual doses, the presence of the iron preventing the wear and tear of the frame under the effects of the mercury, and the powers of life are not so much (scarcely at all) prostrated under its use; it is, consequently, peculiarly eligible for the strumous, irritable, and anemic constitutions. It is prepared by rubbing together one part of the sesquioxide of iron, two of mercury, and three of rose confection, until the mercurial globules cannot be distinguished.—*Lancet*, March 11, 1843.

CELLULAR CYSTICERCUS UNDER THE CONJUNCTIVA.

M. Florent Cunier was called to see a patient who had a small vesicular swelling on the conjunctiva of the right eye, near the cornea, the result of an attack of inflammation following a blow from a butterfly, which had struck against the eye, and left one of its feet in the folds of the membrane. At the time M. Cunier saw it, it was about as large as a pea, and had several enlarged and varicose vessels feeding it; it was not painful, but impeded vision by its encroaching on the cornea. M. Cunier first punctured the vesicle, and the next day dissected it away with a pair of curved scissors. On examining the swelling after it had been withdrawn from the water into which it had been plunged, it was found to represent a transparent, vesicular body, with a swollen extremity, like a caoutchouc bag. When examined under the microscope, it was recognised as a cellular cysticercus, analogous to those that have been already observed in the same part by Baumès, Høring, and Estling. The four suckers and the double circle of hooks were perfectly distinct. After having separated the worm from the remaining portion of cyst, and allowed it to be in water for two hours, it was found to have folded itself on itself, and looked like a piece of crystalline that had been in water for several days; the oblong spot, spoken of by M. Baumès as consisting of the retracted head and neck, were very distinct.—*Annales d'Oculistique*.

WOUND OF THE INTERNAL JUGULAR VEIN, ADMISSION OF AIR.

A butcher, forty years of age, had had for eighteen years a tumor on the left side of the neck, of considerable size, and movable. M. Asmus decided on operating (notwithstanding the great danger of the proceeding), on account of the exceeding difficulty of breathing caused by the diseased growth. He had nearly completed the operation, having only the pedicle to detach, when mistaking the internal jugular vein, which had been separated from the carotid by the tumor, for a mass of cellular tissue, he cut away a portion thereof, and immediately heard the peculiar noise attending the admission of air into the veins. The patient did not suffer from it for the moment, but convulsions soon supervened, and he rolled on the ground in a state of insensibility, followed by opisthotonos. The patient continued in a state of alternate faintings and convulsions during the day, but towards midnight he improved under the influence of stimulants and anti-spasmodics, and ultimately recovered.—*Berlin. Medicin. Zeitung*.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

March 22, 1843.

Mr. F. French presented petitions from two places in Ireland, and from the grand jury of the county of Roscommon, in favor of the Irish Medical Charities' Bill. Mr. F. French asked whether it was intended to bring in a bill for the regulation of the medical profession this session?

Sir James Graham replied, that if the question were repeated some time before Easter, he should be able to give an answer.

SOCIETY FOR IMPROVING THE CONDITION OF THE INSANE.

The premium of twenty guineas, offered by this society for the best essay on the arrangement and nomenclature of mental disorders, has been awarded to Dr. Henry Johnson, of Shrewsbury.

SANITARY REPORTS.

We have to thank Mr. Farr for thirty-six reports on the sanitary condition of the laboring classes, by various medical men, in England and Scotland.

BOOKS RECEIVED.

Remarks on Medical Reform, in a Second Letter addressed to Sir James Graham, by Sir James Clark, Bart., M.D. London: Murray, 1843. pp. 40.

Fourth Annual Report of the Registrar-General of Births, Deaths, and Marriages, in England. 1842. 8vo. pp. 362.

The Plea of Insanity in Criminal Cases. By Forbes Winslow, Esq. London: Renshaw, 1843. 8vo. pp. 78.

An Essay on Apoplexy, from the French of J. A. Gay. By E. Copeman, Esq. London: Churchill, 1843. 8vo. pp. 94.

A New Theory of Disease. By John Tinnion, M.D. Edinburgh: MacLachlan, 1843. pp. 35.

Historical Sketch of the Progress of Pharmacy in Great Britain, &c. By Jacob Bell. London: Churchill, 1843.

TO THE MEDICAL PROFESSION.

JOHN MORTON, 21, Great Charlotte-street, Blackfriar's-road, London, Medical Fitter, Fixture Dealer, Writer on Glass, and Labeller, begs most respectfully to submit a few of his prices, which he feels confident, when compared with others, both in price and quality, cannot be surpassed. —Stopped bottles, pints and quarts, 1s per lb.; carboys, 1s 3d per lb.; drawers, dove-tailed, 2s each; labelling in best style, 3s per dozen; characters, 1s each; speciae jars, labelled inside, 5s each; gold paper labels, large and small, 2s 6d per dozen; counters, glass cases, desks, show glasses, and every article and utensil suitable for the above profession at equally moderate prices. Medical shops fitted in any part of the country. Valuations made and fixtures and fittings bought in any quantity.

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